

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

## IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.

**THIS PAGE BLANK (USPTO)**

Copyright (c) 1993 - 2000 Compugen Ltd.	GenCore version 4.5			
Run on:	September 19, 2002, 17:29:22 ; Search time 23.54 Seconds			
Title:	US-09-524-531C-13			
Perfect score:	1633			
Sequence:	1 MALSRRLRLYARLDPHEFL..... VNYIRTSEEGDFRHKSFV 310			
Scoring table:	BLOSUM62			
Gapop:	10.0 , Gapext 0.5			
Searched:	231628 seqs, 2425594 residues			
All number of hits satisfying chosen parameters:	231628			
Post-processing: Minimum Match 0%	Maximum Match 100%			
Minimum DB seq length: 0	Maximum DB seq length: 200000000			
Listing first 45 summaries				
Database :				
Issued Patents_AA.*				
1: /cgn2_6/podata/2/1aa/5A_COMB_pep:*				
2: /cgn2_6/podata/2/1aa/5B_COMB_pep:*				
3: /cgn2_6/podata/2/1aa/6A_COMB_pep:*				
4: /cgn2_6/podata/2/1aa/6B_COMB_pep:*				
5: /cgn2_6/podata/2/1aa/6C_COMB_pep:*				
Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.				
SUMMARIES				
Result No.	Score	Query Match Length	DB ID	Description
1	415	25.4	299	4 US-09-188-930-331
2	415	25.4	299	4 US-09-4622-20-2
3	403	24.7	299	4 US-09-188-930-189
4	403	24.7	299	4 US-09-4622-20-4
5	242.5	14.8	319	4 US-08-597-495B-22
6	242.5	14.8	319	4 US-09-068-051A-22
7	240.5	14.7	318	4 US-09-068-051A-32
8	197.5	12.1	387	4 US-09-175-928-2
9	173.5	10.6	365	4 US-08-928-383B-2
10	172.5	10.6	365	4 US-08-979-424-3
11	172.5	10.6	365	4 US-09-272-496-2
12	171.5	10.5	390	2 US-08-979-424-1
13	166	10.2	1101	3 US-08-966-485-2
14	160	9.8	869	1 US-08-374-834-16
15	160	9.8	869	2 US-08-644-271-29
16	156.5	9.6	365	4 US-08-928-383B-23
17	156.5	9.6	365	4 US-08-928-383B-24
18	151.5	9.3	365	4 US-08-928-383B-26
19	151	9.2	1091	3 US-08-966-485-5
20	150	9.2	1297	4 US-09-540-245A-17
21	148	9.1	607	2 US-08-752-307B-12
22	147.5	9.0	501	4 US-08-403-095-31
23	147	9.0	95	4 US-08-928-383B-18
24	147	9.0	1395	4 US-09-540-245A-15
25	146.5	9.0	478	5 PCT-US95-08493-15
26	146.5	9.0	860	5 PCT-US95-08493-21
27	146.5	9.0	868	5 PCT-US95-08493-21
ALIGNMENTS				
RESULT	1			
; Sequence	331, Application US/09188930A			
; Patent No.	6150502			
; GENERAL INFORMATION:				
; APPLICANT: Watson, James D.				
; APPLICANT: Strachan, Lorna				
; APPLICANT: Sleeman, Matthew				
; APPLICANT: Onrust, Rene				
; APPLICANT: Murison, James Greg				
; TITLE OF INVENTION: Compositions Isolated From Skin Cells				
; TITLE OF INVENTION: and Methods For Their Use				
; FILE REFERENCE: 11000.101C1				
; CURRENT APPLICATION NUMBER: US/09/188,930A				
; CURRENT FILING DATE: 1998-11-09				
; NUMBER OF SEQ ID NOS: 348				
; SOFTWARE: FastSEQ for Windows Version 3.0				
; SEQ ID NO 331				
; LENGTH: 299				
; TYPE: PRT				
; ORGANISM: Human				
; US-09-188-930-331				
Query Match	25.4 %; Score 415; DB 4; Length 299;			
Best Local Similarity	33.8%; Pred. No. 8.8e-34;			
Matches	100; Conservative 50; Mismatches 132; Indels 14; Gaps 6;			
Qy	18 FFLFLILFRGCMIEAVNLKSNRNPVHEESVLSITHSOTSBDPRWKKKIHDQRTY 77			
Db	15 FILATILCLCSLAGSYTMVHHSSEPEVPIENPKVLSC--LYSGFSPPRVKFDGDTTRL 72			
Qy	78 VFFDNKIQGLLAGRDFVFKTSLRINWNTSDA1YRCVALNDRKEDETIELIQV 137			
Db	73 VCYNNIKITASYEDRV-TFLPGTGTFSVNRDGTGTYC-MVSESGGNSTGEVKVKLIVV 130			
Qy	138 KPVTPVCRIPAAVPVGKTATLQCBSESEGYPRPHYSWYRUDVPLPMDSRANPFRONSEHV 197			
Db	131 PPSKPTVNIPSSATIGNRAVLTCSEODGSPPSEFTWFKGIVMPTNPKSTRAFNSNSSLV 190			
Qy	198 NSFCGTLVNAVKHDGSGOYCIALNSDAGAACRGCGQ-DIENEVDIUNIAGIGGVVWLVL 256			
Db	191 NPTGELVRPLASDTRGEVSCEARNGYCPMTMSNAVRAVENAVNGVVAAVTLL 250			
Qy	257 AVITMGICCAVRRGCFISSKQDGESYKSKQKHGVNIRTS- EBGDFRHKSFV 310			
Db	251 GILVFGIWAVSRSFHDRKKGTSSKK----VIYSOPSAESEGFQTSFLV 299			
RESULT	2			

US-09-462-270-2 Application US/09462270  
; Sequence 2, Application US/09462270  
; Patent No. 6358707  
; GENERAL INFORMATION:  
; APPLICANT: SmithKline Beecham Corporation  
; TITLE OF INVENTION: Receptor Involved in Platelet Aggregation  
; FILE REFERENCE: GH-70150US  
; CURRENT APPLICATION NUMBER: US/09/462, 270  
; CURRENT FILING DATE: 2000-01-05  
; PRIORITY APPLICATION NUMBER: 60/052, 186  
; PRIORITY FILING DATE: 1991-07-10  
; NUMBER OF SEQ ID NOS: 4  
; SOFTWARE: FastSEQ for Windows Version 3.0  
; SEQ ID NO 2  
; LENGTH: 299  
; TYPE: PRT  
; ORGANISM: HOMO SAPIENS  
; US-09-462-270-2

Query Match 25.4%; Score 415; DB 4; Length 299;  
Best Local Similarity 33.8%; Pred. No. 8.8e-34; Mismatches 132; Indels 14; Gaps 6;  
Matches 100; Conservative 50; MisMatches 132; Indels 14; Gaps 6;

Qy 18 FFLLRLRGCMTEAVNLKSSNRNPVHFEFESVLSCLTHSOTSDPRIKKIODOOTY 77  
| | :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|  
Db 15 FILAIALCSLALGSVTVHSSEPVRIPEPNPVLSC--AYSGFSSPRVKEFDQGDTTRL 72

Qy 78 VVFDNKIQLGDLAGRTDVFKGTSRIRWNTRSAIRCEVVALNDRKEDETIELIVQ 137  
| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|  
Db 73 VCYNKKITASVEDRY-TFLPTGIFTKFVSRDGTGTYC-MVSEEGGNSYGEVKVLIVL 130  
| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|  
Db 138 KPYTPVCRIPAAVPVGKTAATLQQCQESEGYPRPHYSWRNDVPLPTDSRANPRONSSHV 197  
| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|  
Db 131 PPSKPTVNIPSSATIGNRAVLCEQDGSPPSEYTWMFKDGIWMPTNPKSTRAFNSYYVL 190  
| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|  
Qy 198 NSETGTLVENAVKDDSGOYCIASNDAGAARCEGO-DMEVYDUNIAGIGGVLLVIL 256  
| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|  
Db 191 NPTIGELVFDPLASADIGEYSCEARNGYGPMTSNAVRMEAVERNGVIVAWLVLTL 250

Qy 257 AVITMGICCCAYRRGCFFSSKQDGESYKSPKGKDGVNVNRTS--EEGFRHSSFVI 310  
| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|  
Db 251 GILVFGIWFAVSRGHFDRTKKGSSKK-----VITYSQPSARSEXEFKQTSSFLV 299

RESULT 3  
US-09-188-930-189

Sequence 188, Application US/09188930A  
; Patent No. 6120502  
; GENERAL INFORMATION:  
; APPLICANT: Watson, James D.  
; APPLICANT: Strachan, Lorna  
; APPLICANT: Sleeman, Matthew  
; APPLICANT: Onrust, Rene  
; APPLICANT: Murison, James Greg  
; TITLE OF INVENTION: Compositions Isolated From Skin Cells  
; FILE REFERENCE: 1100.101cl  
; CURRENT APPLICATION NUMBER: US/09/188, 930A  
; CURRENT FILING DATE: 1998-11-09  
; NUMBER OF SEQ ID NOS: 348  
; SOFTWARE: FastSEQ for Windows Version 3.0  
; SEQ ID NO 189  
; LENGTH: 299  
; TYPE: PRT  
; ORGANISM: HOMO SAPIENS  
; US-09-462-270-4

Query Match 24.7%; Score 403; DB 4; Length 299;  
Best Local Similarity 33.1%; Pred. No. 1.4e-32; Mismatches 98; Conservative 50; MisMatches 134; Indels 14; Gaps 6;  
Matches 64; Conservative 34; MisMatches 89; Indels 4; Gaps 3;

Qy 18 FFLLRLRGCMTEAVNLKSSNRNPVHFEFESVLSCLTHSOTSDPRIKKIODOOTY 77  
| | :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|  
Db 15 FILAIALCSLALGSVTVHSSEPVRIPEPNPVLSC--AYSGFSSPRVKEFDQGDTTRL 72

Qy 78 VVFDNKIQLGDLAGRTDVFKGTSRIRWNTRSAIRCEVVALNDRKEDETIELIVQ 137  
| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|  
Db 73 VCYNKKITASVEDRY-TFLPTGIFTKFVSRDGTGTYC-MVSEEGGNSYGEVKVLIVL 130  
| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|  
Db 138 KPYTPVCRIPAAVPVGKTAATLQQCQESEGYPRPHYSWRNDVPLPTDSRANPRONSSHV 197  
| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|  
Db 131 PPSKPTVNIPSSATIGNRAVLCEQDGSPPSEYTWMFKDGIWMPTNPKSTRAFNSYYVL 190  
| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|  
Qy 198 NSETGTLVENAVKDDSGOYCIASNDAGAARCEGO-DMEVYDUNIAGIGGVLLVIL 256  
| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|  
Db 191 NPTIGELVFEES 201

RESULT 5  
US-08-597-495B-22  
; Sequence 22, Application US/08597495B  
; Sequence 22, Application US/08597495B





ZIP: 02109  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: PatentIn Release #1.0, Version #1.25  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/928, 383B  
 FILING DATE: 12-SEP-1997  
 CLASSIFICATION:  
 PRIORITY APPLICATION DATA:  
 APPLICATION NUMBER: US 60/026, 100  
 FILING DATE: 13-SEP-1996  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Mandragorou, Amy E.  
 REGISTRATION NUMBER: 36, 207  
 REFERENCE/DOCKET NUMBER: DFN-020  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (617)227-7400  
 TELEFAX: (617)742-4214  
 INFORMATION FOR SEQ ID NO: 2:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 365 amino acids  
 TYPE: amino acid  
 LENGTH: 365 amino acids  
 TOPOLOGY: linear  
 MOLECULE TYPE: protein  
 US-08-928-383B-2

Query Match 10.6%; Score 173.5; DB 4; Length 365;  
 Best Local Similarity 26.4%; Pred. No. 2.4e-09; Indels 45; Gaps 12;  
 Matches 70; Conservative 37; Mismatches 113;

Qy 47 ESEVELSCITHS-QPSDP-RIEW-----KKIQPGQTWVFDNIQG---DLAGRDI 93  
 Db 35 ETAVIYPCFKTSPEDOGPQDPELWLTSPADNQKV---QVILLYSGKIVDDYYPDULGRVH 92

Qy 94 V-----FGKTSRLRWNNTSDSAIYRCVALNDRKEDVEITELIVQWKPVTPVCRI 147  
 Db 93 FTSDLKLKGDSASINTNLQSDIGYVCKV--KRAPGVANKKTHLWLVKPSGACYVD 149

Qy 148 AAIVPGKTATLQCQESEGYVRPHYSYR-NDVPLPTDSRANPRFQNSSFHVNSEGTLV 205  
 Db 150 GSEEIGSDFKIKCEPKEGSLPQYEWOKLSDQKMPHTSSLA--EMTSSVISKNAS--- 203

Qy 206 FNAVHKDSDSOYCYIASNDAGARCEGODMEYDUNIAGTAGIGGVIV-VLIVLAVITMGIC 264  
 Db 204 -----SEYSGVSYCTVRNRVGSDOCILRNVPSPNSNKGAGTAGITGLALALIGLIF 258

Qy 265 CAYRRCCPFISSKKQDGESYKSPGKHD 289  
 Db 259 CCRK-----KRREEKYKEKEVHHD 276

RESULT 10  
 US-08-979-424-3  
 ; Sequence 3, Application US/08979424  
 ; Patent No. 5942606  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Lal, Preeti  
 ; APPLICANT: Corley, Neil C.  
 ; TITLE OF INVENTION: VIRAL RECEPTOR PROTEIN  
 ; NUMBER OF SEQUENCES: 3  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: Incyte Pharmaceuticals, Inc.  
 ; STREET: 3174 Porter Dr.  
 ; CITY: Palo Alto  
 ; STATE: CA  
 ; COUNTRY: USA  
 ; ZIP: 94304  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Diskette  
 ; COMPUTER: IBM Compatible  
 ; US-08-928-383B-2

OPERATING SYSTEM: DOS  
 SOFTWARE: FASTSEQ for Windows Version 2.0  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/979, 424  
 FILING DATE: Filed Herewith  
 CLASSIFICATION:  
 PRIORITY APPLICATION DATA:  
 APPLICATION NUMBER:  
 FILING DATE:  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Billings, Lucy J  
 REGISTRATION NUMBER: 36, 749  
 REFERENCE/DOCKET NUMBER: PR-0405 US  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 650-825-0555  
 TELEFAX: 650-845-4166  
 TELEX:  
 INFORMATION FOR SEQ ID NO: 3:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 365 amino acids  
 TYPE: amino acid  
 STRANDEDNESS: single  
 TOPOLOGY: linear  
 IMMEDIATE SOURCE:  
 LIBRARY: Genbank  
 CLONE: 1946351  
 US-08-979-424-3

Query Match 10.6%; Score 172.5; DB 2; Length 365;  
 Best Local Similarity 25.9%; Pred. No. 3.1e-09; Indels 41; Gaps 11;  
 Matches 68; Conservative 38; Mismatches 116;

Qy 47 ESEVELCITHS-QPSDP-RIEW-----KKIQPGQTWVFDNIQG---DLAGRDI 93  
 Db 35 ETAVIYPCFKTSPEDOGPQDPELWLTSPADNQKV---QVILLYSGKIVDDYYPDULGRVH 92

Qy 94 V-----FGKTSRLRWNNTSDSAIYRCVALNDRKEDVEITELIVQWKPVTPVCRI 147  
 Db 93 FTSDLKLKGDSASINTNLQSDIGYVCKV--KRAPGVANKKTHLWLVKPSGACYVD 149

Qy 148 AAIVPGKTATLQCQESEGYVRPHYSYR-NDVPLPTDSRANPRFQNSSFHVNSEGTLV 205  
 Db 150 GSEEIGSDFKIKCEPKEGSLPQYEWOKLSDQKMPHTSSLA--EMTSSVISKNAS--- 203

Qy 208 AVHKDSDGQYCIASNDAGARCEGODMEYDUNIAGTAGIGGVIV-VLIVLAVITMGIC 266  
 Db 201 NASSSEYSGVSYCTVRNRVGSDOCILRNVPSPNSNKGAGTAGITGLALALIGLIF 258

Qy 267 YRRGCFISKKQDGESYKSPGKHD 289  
 Db 261 RK-----KRREEKYKEKEVHHD 276

RESULT 11  
 US-09-272-496-2  
 ; Sequence 2, Application US/09272496  
 ; Patent No. 6245966  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Degregori, James  
 ; APPLICANT: Degregori, James  
 ; TITLE OF INVENTION: Adenoviral mediated gene transfer into lymphocytes  
 ; FILE REFERENCE: 90-98  
 ; CURRENT APPLICATION NUMBER: US/09/272, 496  
 ; CURRENT FILING DATE: 1999-03-19  
 ; EARLIER APPLICATION NUMBER: US 60/092782  
 ; EARLIER FILING DATE: 1998-07-14  
 ; NUMBER OF SEQ ID NOS: 7  
 ; SEQ ID NO 2  
 ; LENGTH: 365  
 ; TYPE: PRT  
 ; ORGANISM: Homo sapiens  
 ; US-09-272-496-2

Query Match 10.6%; Score 172.5; DB 4; Length 365;  
 Best Local Similarity 25.9%; Pred. No. 3.1e-09; Mismatches 68;保守型 38; 混合型 116; Indels 41; Gaps 11;

Matches 80; 激进型 36; Mismatches 122; Indels 83; Gaps 15;

Qy 47 ESELSCITHS-QTSDD-RIEW-----KKIQDGOTTYVFDFNKIQQ---DLAGRTD 93  
 Db 35 ETAYLPCFKTSLSPDQGPDLNPLSPADNQKVYD-QVILYSGDKTYDDYVPLGRVH 92

Qy 94 V-----PKTSRIRIWNTRSDAIYREVALNDRKEDETIELIWQVKPPTPVCRIP 147  
 Db 93 FTSDLKSGDASTNTNLQLSDIGTYQKV--KKAPGVANKIKHLVLUVKPSGARCYVD 149

Qy 148 AAVPVGKTTATLQOQESEGYPRPHYSWYNDVPLPTDSRANPRFQNSSHVNSTGTLYFN 207  
 Db 150 GSPIBIGSDPKIKPEGSPLPYEWOK----LSDSQKMP---TSMIAEMSSVISVYK 200

Qy 208 AVHKDSSQYGCASANDAGAARFGDMEVYDNLINAGITGGVIV-VLTFLAVITMGICCA 266  
 201 NASESYGTYCSTCVNRVGSDOCILRLAVVPPSNKAGLIAGAIGTLLALALIGLIFCC 260

Qy 267 YRGCFITSSKQDERSYKSPGKH 289  
 Db 261 RK-----KRREBKEVHHD 276

RESULT 12  
 US-08-979-424-1  
 ; Sequence 1, Application US/08979424  
 ; Patent No. 5942606  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Lal, Preeti  
 ; APPLICANT: Corley, Neil C.  
 ; TITLE OF INVENTION: VIRAL RECEPTOR PROTEIN  
 ; NUMBER OF SEQUENCES: 3  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: Incyte Pharmaceuticals, Inc.  
 ; STREET: 3174 Porter Dr.  
 ; CITY: Palo Alto  
 ; STATE: CA  
 ; COUNTRY: USA  
 ; ZIP: 94304  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Diskette  
 ; COMPUTER: IBM Compatible  
 ; OPERATING SYSTEM: DOS  
 ; SOFTWARE: FastaSQ for Windows Version 2.0  
 ; CURRENT APPLICATION DATA:  
 ; APPLICATION NUMBER: US/08979, 424  
 ; FILING DATE: Filed Herewith  
 ; CLASSIFICATION:  
 ; PRIOR APPLICATION DATA:  
 ; APPLICATION NUMBER:  
 ; FILING DATE:  
 ; ATTORNEY/AGENT INFORMATION:  
 ; NAME: Billings, Lucy J  
 ; REGISTRATION NUMBER: 36,749  
 ; REFERENCE/DOCKET NUMBER: PF-0405 US  
 ; TELECOMMUNICATION INFORMATION:  
 ; TELEPHONE: 650-855-0555  
 ; TELEX:  
 ; TELEFAX: 650-845-4166

INFORMATION FOR SEQ ID NO: 1:  
 ; SEQUENCE CHARACTERISTICS:  
 ; LENGTH: 390 amino acids  
 ; STRANDEDNESS: single  
 ; TOPOLOGY: linear  
 ; IMMEDIATE SOURCE:  
 ; LIBRARY: LUNGFET03  
 ; CLONE: 1232054

US 08-979-424-1

RESULT 13  
 US-08-986-485-2  
 ; Sequence 2, Application US/08986485  
 ; Patent No. 6046030  
 ; GENERAL INFORMATION:  
 ; APPLICANT: WU, SHUJIAN  
 ; APPLICANT: SWEET, RAYMOND  
 ; APPLICANT: TRUNEH, ALIENSEGED  
 ; TITLE OF INVENTION: A HUMAN LIG-1 HOMOLOG (HLIG-1)  
 ; NUMBER OF SEQUENCES: 8  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: RAINER & PRESTIA  
 ; STREET: P.O. BOX 980  
 ; CITY: VALLEY FORGE  
 ; STATE: PA  
 ; COUNTRY: USA  
 ; ZIP: 19482  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Diskette  
 ; COMPUTER: IBM Compatible  
 ; OPERATING SYSTEM: DOS  
 ; SOFTWARE: FastaSQ for Windows Version 2.0  
 ; CURRENT APPLICATION DATA:  
 ; APPLICATION NUMBER: US/08/986, 485  
 ; FILING DATE: 08-DEC-1997  
 ; CLASSIFICATION:  
 ; PRIOR APPLICATION DATA:  
 ; APPLICATION NUMBER: 60/059, 448  
 ; FILING DATE: 22-SEP-1997  
 ; ATTORNEY/AGENT INFORMATION:  
 ; NAME: PRESTIA, PAUL F  
 ; REGISTRATION NUMBER: 23, 031  
 ; REFERENCE/DOCKET NUMBER: GH-70264  
 ; TELECOMMUNICATION INFORMATION:  
 ; TELEPHONE: 610-407-0700  
 ; TELEFAX: 610-407-0701  
 ; TELEX: 846169

INFORMATION FOR SEQ ID NO: 2:  
 ; SEQUENCE CHARACTERISTICS:  
 ; LENGTH: 1101 amino acids  
 ; TYPE: amino acid  
 ; STRANDEDNESS: single

US 08-979-424-1

Query Match 10.5%; Score 171.5; DB 2; Length 390;  
 Best Local Similarity 24.9%; Pred. No. 4.3e-09; Mismatches 60;保守型 36; 混合型 122; 激进型 83; Indels 83; Gaps 15;

Matches 80; 激进型 36; Mismatches 122; Indels 83; Gaps 15;

Qy 2 ALSRLRLRYALRPHFFLLFRGCMIEAVNUKSSRNPPVHEFSEVELSCITHSQT 61  
 Db 22 ALAPPSSRAQOLHLRP-----ANRQAVEGGEVVPLARYTLE 61

Qy 62 D-----PRIEW---KKIQDGOTTYVFDFNKIQQ---DLAGRTDVF---KISLRIWVTR 107  
 Db 62 SSOPWEVPPVMWFFKQKEREDOVLSYI---NGVITSKPGVSLVYSMPSSRRNLSRLLEGQ 118

Qy 108 SDSAYRCEVALNDRKED---TIELIVQKVPTPPCRPAAYPVGKTTATLQOBES 163  
 Db 119 KDSCPYSCS-VNQDQKDKRSRHSKISLTLVNPAPPSCRIQGVPHVGNVNTLSCQSP 177

Qy 164 EGYPHRPHSYRDVPLPDSDRANPRFONFSFH---VNESETGLVFNWKDSDGOYCI 220  
 Db 178 RSKPAVQYQW-----DRQLPSPFO-TFFAPALDWIRGSLSLTNISSMAGVWCK 225

Qy 221 ASNDAAGAARCE-----GQDMEVYDNLINAGITGGVIVLVLIVLAVITMGICCA 271  
 Db 226 AHNEVGTAQCNVTELEVSTGPGAA---WAGAVWGLVGLGLA---GLVLLYHR--- 273

Qy 274 SSKODGESYKSPG---KHDGV 291  
 Db 274 ---RGKALEEPANDIKEAD 290



Best Local Similarity 28.8%; Pred. No. 2e-07; Matches 70; Conservative 23; Mismatches 82; Indels 68; Gaps 11;

```

QY 28 MIEAVNLKSSNRNPVHEFSEVLS-----CITHSOTSP----- 62
Db 1 MRELVNI----PLVHITLVAFSGTEKLKPAPVITPLETVALVEEVATFNCAVESY 54
QY 63 --PRIEWKK---IQRGQTYWYFDNKIQLGDRGRTDVFHKTSURIWNTRSDAIYRC 116
Db 55 PPEISWTRNKLILKFDFTRYSRBN--GOL-----LTLSVEDSDPGIYCC- 99
QY 117 WALNDRKEYDEETIELIQVKPYPVCRIPAVPV-GKTATIQCQESEGYPRPHYSW 174
Db 100 -TANNGVGAVESCAGALQYKMKP--KLRPPINKEIGUKAVLPCT-MGNPRPSVMI 155
QY 175 RNDVPLPTDSRANPRFQNSSFHVNSTGTIVFNAVKDDSGQQYCITASNDAGARCEGOD 234
Db 156 KGDSLPLRENSRI-----AVLESGSIRIHNVQEDAGQFCVAKUSLGLGAYSKVK 205
235 MEV 237
206 LEV 208

```

Search completed: September 19, 2002, 17:33:15  
 Job time: 233 sec

On protein - protein search, using sw model.

Run on : September 19, 2002, 17:33:15 ; Search time 23.54 Seconds  
 Sequence: (without alignments)  
 Scoring table: 321.662 Million cell updates/sec

Title: US-09-524-531C-15

Perfect score: 1637

Sequence: 1 MALLRPPPLRLCARLPDFFL.....VNYIRIDEEGDFRKSSFVI 310

Gapext 10.0 , Gapext 0.5

Searched: 231628 seqs, 24425594 residues

1 number of hits satisfying chosen parameters:

231628

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Issued\_Patents\_AA:\*

1: /cgn2\_6/podata/2/iaa/5A\_COMB\_pep:\*

2: /cgn2\_6/podata/2/iaa/5B\_COMB\_pep:\*

3: /cgn2\_6/podata/2/iaa/6A\_COMB\_pep:\*

4: /cgn2\_6/podata/2/iaa/6B\_COMB\_pep:\*

5: /cgn2\_6/podata/2/iaa/pcTUS\_COMB\_pep:\*

6: /cgn2\_6/podata/2/iaa/backfiles1.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

### SUMMARIES

Result No.	Score	Query Match Length	DB ID	Description
1	424	25.9	299	4 US-09-188-930-331
2	424	25.9	299	4 US-09-4622-270-2
3	412	25.2	299	4 US-09-188-930-189
4	412	25.2	189	4 US-09-4622-270-4
5	288	17.6	205	4 US-09-4622-270-4
6	228.5	14.0	319	1 US-08-597-455B-22
7	228.5	14.0	319	4 US-09-0688-031A-22
8	215.5	13.2	318	4 US-09-0688-031A-32
9	197.5	12.1	387	4 US-09-175-938-2
10	169.5	10.4	390	2 US-08-979-424-1
11	159.5	9.7	365	2 US-08-579-424-3
12	159.5	9.7	365	4 US-09-272-495-2
13	157.5	9.6	1101	3 US-09-985-2
14	155.5	9.5	612	2 US-08-752-307B-11
15	155.5	9.5	1268	4 US-08-506-995B-28
16	154	9.4	1501	2 US-08-447-464-3
17	154	9.4	1501	2 US-08-16-679-3
18	153	9.3	1651	4 US-09-54-45A-18
19	152.5	9.3	869	1 US-08-374-834-16
20	152.5	9.3	869	2 US-08-644-271-29
21	152	9.3	95	4 US-08-928-383B-18
22	150.5	9.2	698	4 US-08-602-725-36
23	150.5	9.2	734	2 US-08-389-59A-17
24	150.5	9.2	734	3 US-08-987-867A-17
25	147	9.0	365	4 US-08-928-383B-23
26	147	9.0	365	4 US-08-28-383B-24
27	8.9	315	2 US-08-414-657D-47	

### ALIGNMENTS

RESULT 1

US-09-188-930-331

; Sequence 331, Application US/09188930A

; Patent No. 6150502

; GENERAL INFORMATION:

; APPLICANT: Watson, James D.

; APPLICANT: Sleeman, Matthew

; APPLICANT: Onrust, Rene

; APPLICANT: Murison, James Greg

; TITLE OF INVENTION: Compositions Isolated From Skin Cells

; TITLE OF INVENTION: and Methods For Their Use

; FILE REFERENCE: 11000.101C1

; CURRENT APPLICATION NUMBER: US/09/188,930A

; CURRENT FILING DATE: 1998-11-09

; NUMBER OF SEQ ID NOS: 348

; SOFTWARE: FASTSEQ for Windows Version 3.0

; SEQ ID NO 331

; LENGTH: 299

; TYPE: PRT

; ORGANISM: Human

; US-09-188-930-331

Query Match Best Local Similarity 25.9%; Score 424; DB 4; length 299; Matches 101; Conservative 48; Mismatches 137; Indels 22; Gaps 7;

Db 9 RKLCLC--PILATNLCSLAGSVPVHSSPEPVREPINNPVKSCAY--SGFSPRVNE 62

Db 121 EKVKLVLIVLVPSPKPVNITSSATIGNRAVLTCSERODGPSPSEYWFKDGIVMTPNST 180

Db 181 RAFNSNVYINPTPDRBLPDLASDTRGEISCEARINGYGPMTSNAVRBEAVRNVG 240

Qy 68 KKIQDQEQTIVFFDNKIQGDLAGRLGKTSKINVRDSDALYRCVARNDKEID 127

Qy 128 EIVIELTQVQRPVTPVCRVKAQPGKMATHCOPSEGHRPHYSWRYNDVPLPTDSRAN 187

Qy 188 PRFRMSFHINSENGTFLFVAKHDGSGOYCIALNSDASSARCEEQ-EHEVDNIGGI 246

Qy 247 GGVLVVLVLAULALITLGICAYRRGYFINNKQDGES---YKNPKSPDGNYIRDEEGF 302

Db 241 AAVALYLILIGLILVGRGIWAFYASRGHFDRTKGTSKKVTVSOPS-----ARSEGP 291

Db 292 KQISSFLV 299

RESULT 2  
US-09-462-270-2  
; Sequence 2, Application US/09462270

Patent No. 6358707  
GENERAL INFORMATION:  
APPLICANT: Smithkline Beecham Corporation  
TITLE OF INVENTION: Human F11 Antigen: A Cell Surface Receptor Involved in Platelet Aggregation

CURRENT APPLICATION NUMBER: US/09/462,270

CURRENT FILING DATE: 2000-01-05

PRIORITY APPLICATION NUMBER: 60/052,186

PRIORITY FILING DATE: 1997-07-10

NUMBER OF SEQ ID NOS: 4

SOFTWARE: FastSEQ for Windows Version 3.0

SEQ ID NO 2

LENGTH: 299

TYPE: PRT

ORGANISM: HOMO SAPIENS

US-09-462-270-2

Query Match 25.9%; Score 424; DB 4; Length 299;  
Best Local Similarity 32.8%; Pred. No. 2.5e-35; Matches 101; Conservative 48; Mismatches 139; Indels 22; Gaps 7;

Qy 8 RLRLCARLPDFFLFLRQLCLGAVNLKSSNRPPVQBFESVELSCITDSOTSDPRIEW 67  
Db 9 RKLCLC--FILAILLCSLALGSVTWHSSEPEVRIPENPVKLSCAY-SGFSSPRVEW 62

Qy 68 KKIODEQTYYFFDNKIOGDLAGRAEIGTKTSKIKIWNTRRDASALYRECEVVAWRDRKEID 127  
Db 63 KFDQGDTTRLVCNNKTKTASYERVTFL-PTGTFKSVDREDGTYC-MVSSEGGNSYG 120

Qy 128 EIVIELTIVQVKPVTPVCRPKAVPGKMTLHQESEGHPRPHYSWYRNDRVPPTDSRN 187  
Db 121 EVKVKLIVLVPSPKPTVNPISATIGNRAVLTCSEODGSPPSBTWFKDGIVWMPTNPKST 180

Qy 188 PRRNSSPHLNSETGTLVFTAVIKDDSQGYCTASNDAGSARCEEQ-EMEVIDLNGII 246  
Db 181 RAFTNSSVYLNPITGELVDPPLASDPTGEYSCBARNGYGTPMNTSAVRMEAVERNVGIV 240

Qy 247 GGVLVVLVLAALTTLGICCAVRYGFIINKQDSES-YKNKGKPDCGVNYIRTDEEGDF 302  
Db 241 AAUVTXILGLILVFGINWFAYSRGHFDRTKKGKISSKKVIVSQPS-----ARSEEF 291

Qy 303 RHKSFVVI 310  
Db 292 KQISSFLV 299

RESULT 3

US-09-188-930-189

; Sequence 189, Application US/09188930A

; GENERAL INFORMATION:

; APPLICANT: Watson, James D.

; APPLICANT: Strachan, Lorna

; APPLICANT: Sleeman, Matthew

; APPLICANT: Onrust, Rene

; APPLICANT: Murison, James Greg

; TITLE OF INVENTION: Compositions Isolated From Skin Cells

; TITLE OF INVENTION: and Methods For Their Use

; FILE REFERENCE: 1100\_101C1

; CURRENT APPLICATION NUMBER: US/09/188,930A

; CURRENT FILING DATE: 1998-11-09

; NUMBER OF SEQ ID NOS: 348

; SOFTWARE: FastSEQ for Windows Version 3.0

; SEQ ID NO 189

; LENGTH: 299

; TYPE: PRT  
; ORGANISM: Human  
; FEATURE:  
; NAME/KEY: UNSURE  
; LOCATION: (247)...(247)  
; NAME/KEY: UNSURE  
; LOCATION: (289)...(289)

US-09-188-930-189

Query Match 25.2%; Score 412; DB 4; Length 299;

Best Local Similarity 32.1%; Pred. No. 4.2e-34; Matches 99; Conservative 48; Mismatches 139; Indels 22; Gaps 7;

Qy 8 RLRLCARLPDFFLFLRQLCLGAVNLKSSNRPPVQBFESVELSCITDSOTSDPRIEW 67  
Db 9 RKLCLC--FILAILLCSLALGSVTWHSSEPEVRIPENPVKLSCAY-SGFSSPRVEW 62

Qy 68 KKIODEQTYYFFDNKIOGDLAGRAEIGTKTSKIKIWNTRRDASALYRECEVVAWRDRKEID 127  
Db 63 KFDQGDTTRLVCNNKTKTASYERVTFL-PTGTFKSVDREDGTYC-MVSSEGGNSYG 120

Qy 128 EIVIELTIVQVKPVTPVCRPKAVPGKMTLHQESEGHPRPHYSWYRNDRVPPTDSRN 187  
Db 121 EVKVKLIVLVPSPKPTVNPISATIGNRAVLTCSEODGSPPSBTWFKDGIVWMPTNPKST 180

Qy 188 PRRNSSPHLNSETGTLVFTAVIKDDSQGYCTASNDAGSARCEEQ-EMEVIDLNGII 246  
Db 181 RAFTNSSVYLNPITGELVDPPLASDPTGEYSCBARNGYGTPMNTSAVRMEAVERNVGIV 240

Qy 247 GGVLVVLVLAALTTLGICCAVRYGFIINKQDSES-YKNKGKPDCGVNYIRTDEEGDF 302  
Db 241 AAUVTXILGLILVFGINWFAYSRGHFDRTKKGKISSKKVIVSQPS-----ARSEEF 291

Qy 303 RHKSFVVI 310  
Db 292 KQISSFLV 299

RESULT 4

US-09-462-270-4

; Sequence 4, Application US/09462270

; PATENT NO. 6358707

; GENERAL INFORMATION:

; APPLICANT: Smithkline Beecham Corporation

; TITLE OF INVENTION: Human F11 Antigen: A Cell Surface Receptor Involved in Platelet Aggregation

; FILE REFERENCE: GH-7015005

; CURRENT APPLICATION NUMBER: US/09/462,270

; PRIORITY APPLICATION NUMBER: 60/052,186

; PRIORITY FILING DATE: 1997-07-10

; NUMBER OF SEQ ID NOS: 4

; SOFTWARE: FastSEQ for Windows Version 3.0

; SEQ ID NO 4

; LENGTH: 205

; TYPE: PRT

; ORGANISM: HOMO SAPIENS

US-09-462-270-4

Query Match 17.6%; Score 288; DB 4; Length 205;  
Best Local Similarity 33.7%; Pred. No. 1.2e-21; Matches 67; Conservative 32; Mismatches 92; Indels 8; Gaps 4;

Qy 8 RLRLCARLPDFFLFLRQLCLGAVNLKSSNRPPVQBFESVELSCITDSOTSDPRIEW 67  
Db 9 RKLCLC--FILAILLCSLALGSVTWHSSEPEVRIPENPVKLSCAY-SGFSSPRVEW 62

Qy 68 KKIODEQTYYFFDNKIOGDLAGRAEIGTKTSKIKIWNTRRDASALYRECEVVAWRDRKEID 127  
Db 63 KFDQGDTTRLVCNNKTKTASYERVTFL-PTGTFKSVDREDGTYC-MVSSEGGNSYG 120

**RESULT 5**  
**US-08-597-495B-22**  
**Sequence 22, Application US/08597495B**  
**Patent No. 5712369**

**GENERAL INFORMATION:**  
**APPLICANT: Old, Lloyd J.; Welt, Sydney; Ritter, Gerd;**  
**APPLICANT: Simpson, Richard J.; Nice, Edward; Moritz, R. L.;**  
**APPLICANT: Catimel, B.; Ji, Hong; Burgess, Anthony W.;**  
**APPLICANT: Heath, Joan K.; White, Sara J.; Johnston, Cameron**

**TITLE OF INVENTION: Colon Cell And Colon Cancer Cell**  
**TITLE OF INVENTION: Associated Nucleic Acid Molecules, Protein And Peptides**

**NUMBER OF SEQUENCES: 29**  
**CORRESPONDENCE ADDRESS:**  
**ADDRESSEE: Feile & Lynch**  
**STREET: 805 Third Avenue**  
**CITY: New York City**  
**STATE: New York**  
**ZIP: 10022**

**COMPUTER READABLE FORM:**  
**MEDIUM TYPE: Diskette, 3.5 inch, 360 kb storage**  
**COMPUTER: IBM PS/2**  
**OPERATING SYSTEM: PC-DOS**  
**SOFTWARE: Wordperfect**

**CURRENT APPLICATION DATA:**  
**APPLICATION NUMBER: US/08/597,495B**

**APPLICATION NUMBER: 02-Feb-1996**  
**CLASSIFICATION: 435**  
**PRIOR APPLICATION DATA:**  
**APPLICATION NUMBER: 08/511,876**  
**FILING DATE: 04-Aug-1995**  
**ATTORNEY/AGENT INFORMATION:**  
**NAME: Hanson, No. 5712369man D.**

**REGISTRATION NUMBER: 30,946**  
**REFERENCE/DOCKET NUMBER: LUD 5316.1**

**TELECOMMUNICATION INFORMATION:**  
**TELEPHONE: (212) 688-9200**  
**TELEFAX: (212) 838-3884**

**INFORMATION FOR SEQ ID NO: 22:**  
**SEQUENCE CHARACTERISTICS:**  
**LENGTH: 319 amino acids**  
**TYPE: amino acid**  
**TOPOLOGY: linear**  
**US-08-597-495B-22**

**Query Match 14.0% Score 228.5; DB 1; Length 319;  
Best Local Similarity 25.7%; Pred. No. 2.7e-15; Mismatches 128; Indels 51; Gaps 14;**  
**Matches 79; Conservative 49; MisMatches 128; Del 51; Gap 14;**

**Qy 29 IGAVNLKSSNRTPVVQDEFESVELSCII-TDSQTSQPRIEWKKIQQDQTTYVF--FDNK- 83**  
**Db 19 VDAISVETPQDVLRASOGKSYTLPCTHTSTSREGLIQWKLHHTTERVWPPSNKN 78**

**Qy 84 -IQGDL-----AGRAELIGKTSKIKNWVRDSDALYRCVERVARDRKEDEIVTELTV 135**  
**Db 79 YHGELEYKNRVSISNNAE-QSDASITIDOLMADNTYECVSISLMSDLEGTKRSVRLLV 137**

**Qy 136 QVKPVTPVCRPKAVPGKMATLHQESEGHPRPHYSWYRDV----PLPTDSRANPFR 190**  
**Db 138 LVPSPKPECGETEGTIGNNLTQTCOKSKEGSTPQSWKRNILNGQPLAQASQP-- 195**

**Qy 191 RNSSFHNLSETGTGLVPAVHKDQGQCYCLASNDGASCARCE-EQEMEVYDING---GII 246**  
**Qy 136 QVKPVTPVCRPKAVPGKMATLHQESEGHPRPHYSWYRDV----PLPTDSRANPFR 190**

**RESULT 6**  
**US-09-068-051A-22**  
**Sequence 22, Application US/09068051A**  
**Patent No. 6291235**

**GENERAL INFORMATION:**  
**APPLICANT: Old, Lloyd J.; Welt, Sydney; Ritter, Gerd;**  
**APPLICANT: Simpson, Richard J.; Nice, Edward; Moritz, R. L.;**  
**APPLICANT: Catimel, B.; Ji, Hong; Burgess, Anthony W.;**  
**APPLICANT: Heath, Joan K.; White, Sara J.; Johnston, Cameron**

**TITLE OF INVENTION: Colon Cell And Colon Cancer Cell**  
**TITLE OF INVENTION: Associated Nucleic Acid Molecules, Protein And Peptides**

**NUMBER OF SEQUENCES: 33**  
**CORRESPONDENCE ADDRESS:**  
**ADDRESSEE: Fulbright & Jaworski LLP**  
**STREET: 666 Fifth Avenue**  
**CITY: New York City**  
**STATE: New York**  
**ZIP: 10103**

**COMPUTER READABLE FORM:**  
**MEDIUM TYPE: Diskette, 3.5 inch, 360 kb storage**  
**COMPUTER: IBM PS/2**  
**OPERATING SYSTEM: PC-DOS**  
**SOFTWARE: Wordperfect**

**CURRENT APPLICATION DATA:**  
**APPLICATION NUMBER: US/09/068,051A**

**APPLICATION NUMBER: 08/597,495**  
**FILING DATE: 02-Feb-1996**  
**CLASSIFICATION: 435**  
**PRIOR APPLICATION DATA:**  
**APPLICATION NUMBER: 08/511,876**  
**FILING DATE: 04-Aug-1995**  
**ATTORNEY/AGENT INFORMATION:**  
**NAME: Hanson, No. 6291235man D.**

**REGISTRATION NUMBER: 30,946**  
**REFERENCE/DOCKET NUMBER: LUD 5316.2**

**TELECOMMUNICATION INFORMATION:**  
**TELEPHONE: (212) 318-3168**  
**TELEFAX: (212) 752-5958**

**INFORMATION FOR SEQ ID NO: 22:**  
**SEQUENCE CHARACTERISTICS:**  
**LENGTH: 319 amino acids**  
**TYPE: amino acid**  
**TOPOLOGY: linear**  
**US-09-068-051A-22**

**Query Match 14.0% Score 228.5; DB 4; Length 319;  
Best Local Similarity 25.7%; Pred. No. 2.7e-15; Mismatches 128; Indels 51; Gaps 14;**  
**Matches 79; Conservative 49; MisMatches 128; Del 51; Gap 14;**

**Qy 29 IGAVNLKSSNRTPVVQDEFESVELSCII-TDSQTSQPRIEWKKIQQDQTTYVF--FDNK- 83**  
**Db 19 VDAISVETPQDVLRASOGKSYTLPCTHTSTSREGLIQWKLHHTTERVWPPSNKN 78**

**Qy 84 -IQGDL-----AGRAELIGKTSKIKNWVRDSDALYRCVERVARDRKEDEIVTELTV 135**  
**Db 79 YHGELEYKNRVSISNNAE-QSDASITIDOLMADNTYECVSISLMSDLEGTKRSVRLLV 137**



## GENERAL INFORMATION:

APPLICANT: Lal, Preeti

TITLE OF INVENTION: VIRAL RECEPTOR PROTEIN

NUMBER OF SEQUENCES: 3

CORRESPONDENCE ADDRESS:

ADDRESSEE: Incyte Pharmaceuticals, Inc.

STREET: 3174 Porter Dr.

STATE: CA

COUNTRY: USA

ZIP: 94304

COMPUTER READABLE FORM:

MEDIUM TYPE: Disquette

OPERATING SYSTEM: DOS Compatible

SOFTWARE: FASTSEQ for Windows Version 2.0

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/979,424

FILING DATE: Filed Herewith

CLASSIFICATION:

PRIORITY APPLICATION DATA:

APPLICATION NUMBER:

FILING DATE:

ATTORNEY/AGENT INFORMATION:

NAME: Billings, Lucy J

REGISTRATION NUMBER: 36,749

REFERENCE/DOCKET NUMBER: PP-0405 US

TELECOMMUNICATION INFORMATION:

TELEPHONE: 650-825-0553

TELEFAX: 650-845-4166

TELEX:

INFORMATION FOR SEQ ID NO: 1:

SEQUENCE CHARACTERISTICS:

TYPE: amino acid

LENGTH: 390 amino acids

STRANGENESS: single

TOPOLGY: linear

IMMEDIATE SOURCE:

LIBRARY: LUNGFE03

CLONE: 1232054

US-08-979-424-1

## GENERAL INFORMATION:

APPLICANT: Robert W. Finberg, Jeffrey M. Bergelson,

TITLE OF INVENTION: CAR, A NO. 6210921el Coxsackievirus and Adenovirus

NUMBER OF SEQUENCES: 26

CORRESPONDENCE ADDRESS:

ADDRESSEE: LAHIVE &amp; COCKFIELD, LLP

STREET: 28 State Street

CITY: Boston

STATE: Massachusetts

COUNTRY: USA

ZIP: 02109

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/928,383B

FILING DATE: 12-SEP-1997

CLASSIFICATION:

PRIORITY APPLICATION DATA:

APPLICATION NUMBER: US 60/026,100

FILING DATE: 13-SEP-1996

ATTORNEY/AGENT INFORMATION:

NAME: Mandrigours, Amy E.

REGISTRATION NUMBER: 36,207

REFERENCE/DOCKET NUMBER: DPN-020

TELECOMMUNICATION INFORMATION:

TELEPHONE: (617)227-7400

TELEFAX: (617)742-4214

INFORMATION FOR SEQ ID NO: 2:

SEQUENCE CHARACTERISTICS:

LENGTH: 365 amino acids

TYPE: amino acid

TOPOLGY: linear

MOLECULE TYPE: protein

US-08-928-383B-2

US-08-979-424-1

Query Match 10.4%; Score 169.5; DB 2; Length 390;

Best Local Similarity 26.3%; Pred. No. 4e-09; Mismatches 116; Indels 63; Gaps 14;

Matches 77; Conservative 37; Mismatches 116; Indels 63; Gaps 14;

2 ALRRPPRLRCA RLDEFL LFLR CLIGAVNLKNSN RTRPVWQEGESV ---ELSCILIT 56

Db 22 ALAPPSRAQLQLHLP-----ANRLOAVEGGEVLPWYTLHGEVS 61

Qy 57 DSQTSD-PREW---KKIODEQTIVFFDNKIOG---DLAGRAEIL---GKTSKIKWNTRDASLYRC 115

Db 62 SSOPHEVPTWFFKQKEKDQVLSYI--NGVITSKPGYSLVYSMPSRNLISRLREGLOE 118

Qy 108 RD SALYRCEV-VARNDRKEIDETIV-IELTVQVKPVTPVCRVKAVPVGKMATLHCQESE 164

Db 119 KDSGFYCSVNVQDKRGSKRSRHKSIRKLELNVLWVPPAPSPCRQGVPHVGANTVLSQSPR 178

Qy 165 GHPRPHYSWTRNDVPLPTDSRANPFRNFSFH--LNSETGTIVTAVHKDDSSOYCIA 221

Db 179 SKPAVQYOW-----DRQLPSFO-TFFAPALDVIRGSLSLJNLSSSMAGVYCKA 226

Qy 222 SMDAGSARCBEQEMEVYD---LNIGGIIGGVLVVLAVLA LITLGICCAVRRG 270

Db 227 HNEVGTQAC-NVTLEVSTGPGGA VVAGAVVGTIVSLLGLAGLV--LYHRRG 275

RESULT 11

US-08-979-424-3

Sequence 3, Application US/08979424

Patent No. 5,942,606

GENERAL INFORMATION:

APPLICANT: Lal, Preeti

APPLICANT: Corley, Neil C.

RESULT 10

US-08-928-383B-2

Sequence 2, Application US/08928383B

Patent No. 6,210,921

TITLE OF INVENTION: VIRAL RECEPTOR PROTEIN  
 NUMBER OF SEQUENCES: 3  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: Incyte Pharmaceuticals, Inc.  
 STREET: 3174 Porter Dr.  
 CITY: Palo Alto  
 STATE: CA  
 COUNTRY: USA  
 ZIP: 94304  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Diskette  
 COMPUTER: IBM Compatible  
 OPERATING SYSTEM: DOS  
 SOFTWARE: FastSEQ for Windows Version 2.0  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/979,424  
 FILING DATE: Filed Herewith  
 CLASSIFICATION:  
 PRIORITY APPLICATION DATA:  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Billings, Lucy J  
 REGISTRATION NUMBER: 36,749  
 REFERENCE/DOCKET NUMBER: PF-0405 US  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 650-855-0555  
 TELEX: 650-845-4166  
 INFORMATION FOR SEQ ID NO: 3:  
 LENGTH: 365 amino acids  
 TYPE: amino acid  
 STRANDEDNESS: single  
 TOPOLOGY: linear  
 IMMEDIATE SOURCE:  
 LIBRARY: GenBank  
 CLONE: 1946351  
 US-08-979-424-3

Query Match 9.7%; Score 159.5; DB 2; Length 365;  
 Best Local Similarity 26.5%; Pred. No. 3; Be-08;  
 Matches 74; Conservative 35; Mismatches 123; Indels 47; Gaps 13;  
 Matches 74; Conservative 35; Mismatches 123; Indels 47; Gaps 13;  
 QY 21 LLLFRGCGILGAVNLKSSNRTPVQEF----ESVELSCIIIDS-QTSDP-RIEW---- 67  
 Dr. 3 LLICFVLLGIVWDFAEISLITPEEMEEKAKGETAYLPCKFLSPEDQGPPLDIEWLSPA 62  
 QY 68 --RKKIQCCTTYFEDNLIQ---DIAGRAEL----GATSLKIWNWIRRDALYRC 115  
 Db 63 DNOKV--DQVILYSGDKRYDDVYPDLKGVRHFTSNDLKGDASINVNTLQSDIGYOC 120  
 QY 116 EVVARNDRKKEIDEV--IELTVQVKQVTPVCRVPKAVPVGKMATLHQCESEGHPRPHS 172  
 Db 121 KV-----KKAQGVANKHLVLUVKSGARGCYVDGSEEGDFKIKCEPREGSPLQYE 174  
 QY 173 WYRNDDVPLPTDSANPRFRNSPHLNSETGTLYFTAVHKDDGGYYCIAANDAGSARCE 232  
 Db 175 WOK----LSDSQKMP--TSNAEMTSSIVSKNASSETSGTYSTVNRNGSDOCLL 225  
 QY 233 QENEVYDUNLIGGIGGVLV-VIAVLALITLTGTCCAVRR 269  
 Db 226 RLNVVPPSNRAGLIAITGTLALLALIGLIFCCRKK 264  
 US-08-979-424-3

RESULT 13  
 US-08-986-485-2  
 ; Sequence 2, Application US/08986485  
 ; Patent No. 6046030  
 GENERAL INFORMATION:  
 APPLICANT: Wu, Shujian  
 APPLICANT: Sweet, Raymond  
 APPLICANT: Truneh, Alemsieged  
 TITLE OF INVENTION: A HUMAN LIG-1 HOMOLOG (HLIG-1)  
 NUMBER OF SEQUENCES: 8  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: RAINER & PRESTIA  
 STREET: P. O. BOX 980  
 CITY: VALLEY FORGE  
 STATE: PA  
 COUNTRY: USA  
 ZIP: 19482  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Diskette  
 COMPUTER: IBM Compatible  
 OPERATING SYSTEM: DOS  
 SOFTWARE: FastSEQ for Windows Version 2.0  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/986,485  
 FILING DATE: 08-DEC-1997  
 CLASSIFICATION:  
 PRIORITY APPLICATION DATA:  
 APPLICATION NUMBER: 60/059,448  
 FILING DATE: 22-SEP-1997  
 ATTORNEY/AGENT INFORMATION:  
 NAME: PRESTIA, PAUL F  
 REGISTRATION NUMBER: 23,031  
 REFERENCE/DOCKET NUMBER: GH-70264  
 TELECOMMUNICATION INFORMATION:

TELEPHONE: 610-407-0700  
 TELEFAX: 610-407-0701  
 TELEX: 846159  
 INFORMATION FOR SEQ ID NO: 2:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 1101 amino acids  
 TYPE: amino acid  
 STRANDEDNESS: single  
 TOPOLOGY: linear  
 MOLECULE TYPE: protein  
 US-08-986-485-2

Query Match 9, 6%; Score 157.5; DB 3; Length 1101;  
 Best Local Similarity 23.2%; Pred. No. 3.1e-07; Mismatches 70; Conservative 45; Indels 67; Gaps 15; Matches 70;

QY 34 LKSSNRTP--WVQRFESVSLSCITDSQSPDPRIEWKK-----IDPQTYYFDNK 83

606 LPSFTKTPHDITIRTTVARLCAAGH--PNPOTAWQKDGTDPAAERRRMHVMDD- 662

84 IGGDLAGRATIGKLSKLINWNTRDSALYRCERVARNDRKEDIVIELTVQKVPTV 143

Db 663 -----DVEFLIDVKI----DDAGVSC--TAQNSAGSISNA-TUTVLEPLSV 705

QY 144 CRRVKAVPKWMATHQCOSEGHPRHYSMWRNDVPLPTDSRANPFRNNSFHINSETG 203

Db 706 PLEDRVWSVGETVALQC-KATGNPPRITWFGDRPLSLTER-----HHLFPDNQ 755

QY 204 LVFTAVHKDQSGQYCCIASNDAGSARCEDEMEVLDNI-----GGIG-GVLV 252

756 LVQVNVAEDAGRYTCMSMNLGTERAHSO-----LSVLPAAGCRKDGTIVGIFTIAV 809

QY 253 LAVLALITLGICAVRGVFINNKODGESVKNPKG---PDGVNVIRTDEEGFRHKSSF 308

Db 810 SSIVTSLVWVCTIQ---TRKISEEYSNTNTDVVPDPVPSL--SQGTS-SDQET 863

QY 309 VI 310

Db 864 WV 865

RESULT 14  
 US 08-752-307B-11  
 ; Sequence 11, Application US/08752307B  
 ; Patent No. 5952171  
 ; GENERAL INFORMATION:  
 ; APPLICANT: McCarthy, Sean A.  
 ; APPLICANT: Gearing, David P.  
 ; APPLICANT: Levinson, Douglas A.  
 ; APPLICANT: Phillips, Greg  
 ; APPLICANT: Cunningham, Bruce A.  
 ; APPLICANT: Crossin, Kathryn L.  
 ; TITLE OF INVENTION: METHOD FOR IDENTIFYING GENES  
 ; TITLE OF INVENTION: ENCODING NOVEL SECRETED OR MEMBRANE-ASSOCIATED PROTEIN  
 ; NUMBER OF SEQUENCES: 14  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: Fish & Richardson, P.C.  
 ; STREET: 225 Franklin Street  
 ; CITY: Boston  
 ; STATE: MA  
 ; COUNTRY: US  
 ; ZIP: 02110-2804  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Diskette  
 ; COMPUTER: IBM Compatible  
 ; OPERATING SYSTEM: Windows95  
 ; SOFTWARE: FastSEO for Windows Version 2.0  
 ; CURRENT APPLICATION DATA:  
 ; APPLICATION NUMBER: US/08/752,307B  
 ; FILING DATE: 19-NOV-1996  
 ; CLASSIFICATION: 435  
 ; PRIOR APPLICATION DATA:  
 ; APPLICATION NUMBER:  
 ; FILING DATE:  
 ; ATTORNEY/AGENT INFORMATION:  
 ; NAME: Fitting, Thomas  
 ; REGISTRATION NUMBER: 34,163  
 ; REFERENCE/DOCKET NUMBER: TSRI 488.0  
 ; TELECOMMUNICATION INFORMATION:  
 ; TELEPHONE: (619) 554-2937  
 ; TELEFAX: (619) 554-6112  
 ; INFORMATION FOR SEQ ID NO: 28:  
 ; SEQUENCE CHARACTERISTICS:

NAME: Meiklejohn, Ph.D., Anita L.  
 REGISTRATION NUMBER: 35,283  
 REFERENCE/DOCKET NUMBER: 09404/020001  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 617-542-5070  
 TELEX: 200154  
 INFORMATION FOR SEQ ID NO: 11:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 612 amino acids  
 TYPE: amino acid  
 MOLECULE TYPE: protein  
 TOPOLogy: linear  
 MOLECULE TYPE: protein  
 US-08-752-307B-11

Query Match 9, 5%; Score 155.5; DB 2; Length 612;  
 Best Local Similarity 30.2%; Pred. No. 2.1e-07; Mismatches 60; Conservative 21; Indels 43; Gaps 10; Matches 60;

QY 40 TPVQDEFESV-----LSCITSQTSQSPRIENKKIDE-QTYVFENKIQDLAGR 91

Db 248 TPMGSTSNKVELRGNVLLCIEGLPLT--PVWIKEGELPANRTFEN----- 296

QY 92 AEILGKTSKLNWNTRDSALYRCERVARNDRKEDIVIELTVQKVPTVCRVKAP 151

Db 297 ----PKKTTIDVSEADSGNYKC--TARWTLGSPHH-VISVTWKAAPPWTABRNVLIS 349

QY 152 VGMATLHQCOSEGHPRHYSMWRNDVPL--PTD-SRANPFRNNSFHINSETGLTVT 207

Db 350 PGEDGLICR-ANGPKPSISWLTNQVPAIAPEDPSR-----KVDGDTIIFS 396

QY 208 AVHKDQSGQYCCIASNDAG 226

Db 397 AVQERSSAVYQCNASNEYG 415

RESULT 15  
 US-08-506-296B-28  
 ; Sequence 28, Application US/08506296B  
 ; Patent No. 6313265  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Phillips, Greg  
 ; APPLICANT: Cunningham, Bruce A.  
 ; APPLICANT: Crossin, Kathryn L.  
 ; TITLE OF INVENTION: NEURITE OUTGROWTH-PROMOTING POLYPEPTIDES  
 ; TITLE OF INVENTION: CONTAINING FIBRONECTIN TYPE III REPEATS AND METHODS OF USE  
 ; NUMBER OF SEQUENCES: 77  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: The Scripps Research Institute  
 ; STREET: 10550 No. 6313265th Torrey Pines Road, TPC-8  
 ; CITY: La Jolla  
 ; STATE: California  
 ; COUNTRY: U.S.  
 ; ZIP: 92037  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Floppy disk  
 ; COMPUTER: IBM PC compatible  
 ; OPERATING SYSTEM: PC DOS/MS-DOS  
 ; SOFTWARE: PatentIn Release #1.0, Version #1.25  
 ; CURRENT APPLICATION DATA:  
 ; APPLICATION NUMBER: US/08/506, 296B  
 ; FILING DATE: 24-JUL-1995  
 ; CLASSIFICATION: 514  
 ; ATTORNEY/AGENT INFORMATION:  
 ; NAME: Fitting, Thomas  
 ; REGISTRATION NUMBER: 34,163  
 ; REFERENCE/DOCKET NUMBER: TSRI 488.0  
 ; TELECOMMUNICATION INFORMATION:  
 ; TELEPHONE: (619) 554-2937  
 ; TELEFAX: (619) 554-6112  
 ; INFORMATION FOR SEQ ID NO: 28:  
 ; SEQUENCE CHARACTERISTICS:

; LENGTH: 1268 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
US-08-506-236B-28

Query Match 9.5%; Score 155.5; DB 4; Length 1268;  
Best Local Similarity 30.2%; Pred. No. 6.2e-07; Matches 75; Indels 43; Gaps 10;  
Matches 60; Conservative 21; Mismatches 75;

QY 40 TPVQVEFFESVE-----LSCITIDSQTSDPRIEWKKIODE-QTYFFDNKIQGDLAGR 91  
||: ||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :|||  
Db 248 TPGSTSINKVELGRNVLLCIAGLPT--PVIRWKEEGELPANRTEFFEN----- 296  
QY 92 AETLGKTSLSKIKNWTRRDASALYCEVVAWRDRKEIDEVIELTWQVKVTPVCRVPKAVP 151  
||: ||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :|||  
Db 297 ---FKKTLKLIDIVSEADSGNYKC---TARNTLGSTHH VISVKAAPYWITAPRNLYLS 349  
QY 152 VGMATLHCQESGHPRHYSWMRNDPL---PTD-SRANPRFRNSFHNLSETGTIVFT 207  
||: ||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :|||  
Db 350 PGDGDTLICR-ANGNPKPSISWLNTGVPIATAEDPSR-----KVGDGTILFS 396  
QY 208 AVIKDDDSQQYCYCTASNDAG 226  
||: ||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :|||  
Db 397 AVQERSSAVYQCNASNEVG 415

Search completed: September 19, 2002, 17:33:16  
Job time: 234 sec

Copyright (c) 1993 - 2000 Compugen Ltd.  
GenCore version 4.5

Qy 249 VLVVLAVL 256  
 |||||  
 Db 241 VLVVLAVL 248

RESULT 2

A86406 probable RING zinc finger protein [imported] - *Arabidopsis thaliana*  
 C;Species: *Arabidopsis thaliana* (mouse-ear cress)  
 C;Date: 02-Mar-2001 #sequence\_revision 02-Mar-2001 #text\_change 31-Mar-2001  
 C;Accession: A86406

R;Theologis, A.; Ecker, J.R.; Palm, C.J.; Federspiel, N.A.; Kaul, S.; White, O.; Alonso, C.; Chin, C.W.; Chung, M.K.; Conn, L.; Conway, A.B.; Conway, A.R.; Creasy, T.H.; Dewar, K.; ansen, N.F.; Hughes, B.; Hulzar, L.  
*Nature* 408, 816-820, 2000

A;Authors: Hunter, J.L.; Jenkins, J.; Johnson-Hopson, C.; Khan, S.; Khaykin, E.; Kim, C.; Li, J.H.; Li, Y.; Lin, X.; Liu, S.X.; Liu, Z.A.; Luros, J.S.; Maili, R.; Marziali, Rizzo, M.; Rooney, T.; Rowley, D.; Sakano, H.; Shinn, P.; Southwick, A.M.; Sun, H.; Tallon, M.; Wu, D.; Yu, G.; Fraser, C.M.; Venter, J.C.; Davis, R.W.  
 A;Title: Sequence and analysis of chromosome 1 of the plant *Arabidopsis*.  
 A;Accession: A86406  
 A;Status: preliminary  
 A;Molecule type: DNA  
 A;Residue: 1-335 <SPO>  
 A;Cross-references: GB:AE005172; NID:911024872; PIDN:AAG26956.1; GSPDB:GN00141  
 C;Genetics:  
 A;Map position: 1

Query Match 2.6%; Score 8; DB 2; Length 336;  
 Best Local Similarity 100.0%; Pred. No. 6.6; Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 250 LVVLAVLA 257  
 |||||  
 Db 28 LVVLAVLA 35

RESULT 3

H1HCA4  
 H1HCA4  
 HIC class I histocompatibility antigen HLA-C4 alpha chain - human  
 C;Species: Homo sapiens (man)  
 C;Date: 31-Dec-1988 #sequence\_revision 31-Dec-1988 #text\_change 22-Jun-1999

B;Davidson, W.F.; Kress, M.; Khoury, G.; Jay, G.  
 B;iol. Chem. 250, 13414-13423, 1985

A;Title: Comparison of HLA class I gene sequences. Derivation of locus-specific oligonucleotide probes for HLA class I genes. Nucleic Acids Res. 13, 13414-13423, 1985  
 A;Reference number: A92500; MUID:86033791  
 A;Accession: A24512  
 A;Molecule type: DNA  
 A;Residues: 1-342 <DAV>  
 A;Cross-references: GB:ML1886; NID:6184173; PIDN:AAK52665.1; PID:9386777  
 C;Genetics:

A;Gene: GDB:HLA-C  
 A;Cross-references: GDB:119311; OMIM:142840  
 A;Map position: 6p21.3-6p21.3

C;Superfamily: class I histocompatibility antigen; immunoglobulin homology <IMM>  
 C;Keywords: glycoprotein, heterodimer; transmembrane protein; transplantation antigen F:196-261/Domain: immunoglobulin homology <IMM>  
 F:86/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 2.6%; Score 8; DB 1; Length 342;  
 Best Local Similarity 100.0%; Pred. No. 6.7; Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 249 VLVVLAVL 256  
 |||||  
 Db 293 VLVVLAVL 300

RESULT 4

E82933 type I restriction enzyme M protein, truncated homolog uu098 [imported] - *Ureaplasma urealyticum*  
 C;Species: *Ureaplasma urealyticum*  
 C;Date: 18-Aug-2000 #sequence\_revision 20-Aug-2000 #text\_change 20-Aug-2000

C;Accession: E82933  
 R;Glass, J.I.; Leikowitz, E.J.; Glass, J.S.; Heiner, C.R.; Chen, E.Y.; Cassell, G.H. submitted to Genbank, February 2000

A;Description: The complete sequence of *Ureaplasma urealyticum*: Alternate views of a reference sequence.

A;Accession: A82870

A;Accession: E82333

A;Status: preliminary  
 A;Molecule Type: DNA  
 A;Residues: 1-348 <GLA>

A;Cross-references: GB:AE002110; GB:AF222894; NID:96899051; PIDN:AAF30504.1; GSPDB:GN00141

A;Experimental source: serovar 3; blovart 1

C;Genetics:

A;Gene: hsm-1; UU098  
 A;Genetic code: SGCG3

Query Match 2.6%; Score 8; DB 2; Length 348;  
 Best Local Similarity 100.0%; Pred. No. 6.8; Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 123 RKEIDEIV 130  
 |||||  
 Db 336 RKEIDEIV 343

RESULT 5

JH0546 class I histocompatibility antigen Gogo-C0202 heavy chain precursor - lowland gorilla  
 C;Species: Gorilla gorilla gorilla (lowland gorilla)

C;Date: 30-Jun-1992 #sequence\_revision 30-Jun-1992 #text\_change 23-Jul-1999

C;Accession: JH0546  
 R;Lawlor, D.A.; Warren, E.; Taylor, P.; Parham, P.  
 J. Exp. Med. 174 1491-1509, 1991

A;Title: Gorilla class I major histocompatibility complex alleles: comparison to human  
 A;Reference number: JH0534; MUID:92078860

A;Accession: JH0546

A;Molecule type: DNA  
 A;Residues: 1-366 <LAW>

A;Cross-references: EMBL:X60249; NID:922882; PIDN:CAA42801.1; PID:922883

A;Experimental source: EBV-transformed B cell

C;Genetics:

A;Introns: 25/1; 115/1; 207/1; 299/1; 339/1; 350/1; 366/1

C;Superfamily: class I histocompatibility antigen; immunoglobulin homology  
 C;Keywords: transmembrane protein

F:1-24/Domain: signal peptide #status predicted <SIG>  
 F:25-36/Domain: class I histocompatibility antigen heavy chain, Gogo-C0202 #status predicted  
 F:25-14/Domain: alpha-1 <AL1>  
 F:115-206/Domain: alpha-2 <AL2>  
 F:207-298/Domain: alpha-3 <AL3>  
 F:299-366/Domain: intracellular #status predicted <INT>

Query Match 2.6%; Score 8; DB 2; Length 366;  
 Best Local Similarity 100.0%; Pred. No. 7.1; Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 249 VLVVLAVL 256  
 |||||  
 Db 317 VLVVLAVL 324

RESULT 6

JH0547 class I histocompatibility antigen Gogo-C0203 heavy chain precursor - lowland gorilla  
 C;Species: Gorilla gorilla gorilla (lowland gorilla)

C;Date: 30-Jun-1992 #sequence\_revision 30-Jun-1992 #text\_change 23-Jul-1999

Copyright (c) 1993 - 2000	GenCore version 4.5	Compugen Ltd.		
<b>OM protein - protein search, using sw model</b>				
Run on:	September 19, 2002, 17:46:24	; Search time 17.64 Seconds		
Sequence:	US-09-524-531C-15	(without alignments)		
Scoring table:	OLIGO	680.446 Million cell updates/sec		
Searched:	105224 seqs, 38719550 residues			
Total number of hits satisfying chosen parameters:	105224			
Minimum DB seq length:	0			
Maximum DB seq length:	200000000			
Post-processing:	Listing first 75 summaries			
Database :	SwissProt_40,*			
Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.				
<b>SUMMARIES</b>				
Result No.	Score	Query Match Length DB ID	Description	
1	8	2.6 80 1 TX3A_PHONI	P81793 phoneutria	
2	8	2.6 342 1 ICXX_HUMAN	P10321 homo sapien	
3	8	2.6 366 1 IC02_GORGO	P30385 gorilla gor	
4	8	2.6 366 1 103_GORGO	P30386 gorilla gor	
5	8	2.6 366 1 IC04_GORGO	P30387 gorilla gor	
6	8	2.6 366 1 IC11_HUMAN	P29631 homo sapien	
7	8	2.6 435 1 YGIK_SALTY	P40800 salmonella	
8	7	2.3 244 1 XLR1_MOUSE	P92114 mus musculu	
9	7	2.3 244 1 TNFC_HUMAN	P06643 homo sapien	
10	7	2.3 302 1 HTFP_AQUAE	P67798 aquifex aeo	
11	7	2.3 306 1 TNFC_MOUSE	P41155 mus musculu	
12	7	2.3 333 1 GPR8_HUMAN	P48146 homo sapien	
13	7	2.3 343 1 HMD_METVNO	P50840 methanococcus	
14	7	2.3 403 1 TYRP_ECOLI	P18199 escherichia	
15	7	2.3 417 1 PVR_CIRAE	P32056 cercopithec	
16	7	2.3 417 1 PVR_HUMAN	P1551 homo sapien	
17	7	2.3 454 1 APY_SOLTU	P80595 solanum tub	
18	7	2.3 481 1 LMRA_STRLN	P46104 streptomyce	
19	7	2.3 491 1 CPB4_RABIT	P00178 oryctolagus	
20	7	2.3 491 1 CPB5_RABIT	P12789 oryctolagus	
21	7	2.3 524 1 GTR2_HUMAN	P1168 homo sapien	
22	7	2.3 595 1 IF2P_ARCFU	O29490 archaeoglob	
23	7	2.3 617 1 PYS1_PSEAE	O06583 pseudomonas	
24	7	2.3 643 1 PGT_HUMAN	O9259 homo sapien	
25	7	2.3 643 1 PGT_RAT	Q00310 ratmus norv	
26	7	2.3 688 1 PY2_PSEAE	Q06584 pseudomonas	
27	7	2.3 697 1 TGLC_CHICK	Q01841 gallus gall	
28	7	2.3 721 1 YII_ECOLI	P39396 escherichia	
29	7	2.3 758 1 SC18_YEAST	P18759 saccharomyces	
30	7	2.3 840 1 CC16 YEAST	P09798 saccharomyces	
31	7	2.3 981 1 SCA4_RICFE	Q9ai37 rickettsia	
32	7	2.3 981 1 K6P1_CANAL	Q94101 candida alb	
33	7	2.3 981 1 SCA4_RICSTI	Q9a3j77 rickettsia	
<b>ALIGNMENTS</b>				
RESULT 1 TX3A_PHONI				
ID TX3A_PHONI	STANDARD:	PRT: 80 AA.		
AC P81793;	DT 01-MAR-2002 (Rel. 41, Created)	DT 01-MAR-2002 (Rel. 41, Last sequence update)		
DT DT 01-MAR-2002 (Rel. 41, Last annotation update)	DT 01-MAR-2002 (Rel. 41, Last annotation update)			
DE Neurotoxin PnA precursor.				
Phoneutria nigriventer (Brazilian armed spider).				
Eukaryota; Metazoa; Arthropoda; Cheliceraata; Arachnida; Araneae; Aranomorphae; Entelegynae; Lycosidae; Ctenidae; Phoneutria.				
NCB_TaxID=6918;				
RN [1]				
SEQUENCE FROM N.A.				
RT TISSUE=venom gland;				
RT MEDLINE:99053116; PubMed=9839681;				
RA Kalpothakis E., Penaforde C.L., Leao R.M., Cruz J.S., Prado V.F., Cordeiro M.N., Diniz C.R., Romano-Silva M.A., Prado M.A.M., Gomez M.V., Beirao P.S.L.;				
RA "Cloning, cDNA sequence analysis and patch clamp studies of a toxin from the venom of the armed spider (Phoneutria nigriventer).";				
RT Toxicon 36:1971-1980(1998).				
CC -!- FUNCTION: ANTAGONIST OF L-TYPE CALCIUM CHANNELS (By similarity).				
CC -!- SUBCELLULAR LOCATION: Secreted.				
CC -!- TISSUE SPECIFICITY: Produced by the venomous gland.				
-!- SIMILARITY: BELONGS TO THE SPIDER TOXIN TX3 FAMILY.				

FT	DISULFID	164	203	BY SIMILARITY.
FT	SEQUENCE	342 AA;	38082 MW;	22C39A6D84C05D09 CRC64;
DR	InterPro; IPR04169; Spidertoxin.			
KW	Calcium channel inhibitor; Toxin; Neurotoxin; Signal.			
FT	SIGNAL	1	21	POTENTIAL.
FT	PROPEP	22	37	POTENTIAL.
FT	CHAIN	38	71	NEUROTOXIN PN3A..
FT	PROPEP	72	80	POTENTIAL.
SQ	SEQUENCE	80 AA;	8937 MW;	B5BF209257EB6793 CRC64;
Query Match	2.6%	Score 8;	DB 1;	Length 80;
Best Local Similarity	100.0%	Pred. No. 0.98;		
Matches	8;	Conservative 0;	Mismatches 0;	Indels 0;
		Gaps 0;		
Qy	256 LALITGI 263			
ID	I_IXXX_HUMAN	STANDARD;	PRT;	342 AA.
AC	P10321;			
DT	01-MAR-1989 (Rel. 10, Created)			
DT	01-MAR-1989 (Rel. 10, Last sequence update)			
DT	16-OCT-2001 (Rel. 40, Last annotation update)			
DE	HLA class I histocompatibility antigen, C-4 alpha chain.			
GN	HIA-C OR HLA-C			
OC	Homo sapiens (Human); Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.			
OC	NCBI_TAXID=9606;			
RN	[1] SQUENCE FROM N.A.			
RX	RP SQUENCE FROM N.A.; PubMed=3863816;			
RA	DAVIDSON W.F., Kress M., Khouri G., JAY G.;			
RA	"Comparison of HLA class I gene sequences. Derivation of locus-specific oligonucleotide probes specific for HLA-A, HLA-B, and HLA-C genes";			
RT	J. Biol. Chem. 260:13414-13423(1985).			
RL	-1- FUNCTION: INVOLVED IN THE PRESENTATION OF FOREIGN ANTIGENS TO THE IMMUNE SYSTEM.			
CC	-1- SUBUNIT: DIMER OF ALPHA CHAIN AND A BETA CHAIN (BETA-2-MICROGLOBULIN).			
CC	This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See <a href="http://www.isb-sib.ch/announce/">http://www.isb-sib.ch/announce/</a> or send an email to licensee@isb-sib.ch).			
CC	EMBL; P30685; 1A9B.			
CC	DR MIM: 142840; -.			
CC	DR InterPro; IPR03006; IG_MHC.			
CC	DR InterPro; IPR003597; Ig_C1.			
CC	DR InterPro; IPR001039; MHC_I.			
CC	DR Pfam; PF00047; Ig_1.			
CC	DR Pfam; PF00129; MHC_I; 1.			
CC	DR ProDom; P000050; MHC_I; 1.			
CC	DR SMART; SM00407; IgC1; 1.			
CC	DR PROSITE; PS00290; IG_MHC; FALSE_NEG.			
CC	DR SMART; SM00407; IgC1; 1.			
DR	PRION; PR00129; MHC_I; 1.			
DR	PRODOM; PD000050; MHC_I; 1.			
DR	SMART; SM00407; IgC1; 1.			
DR	PROSITE; PS00290; IG_MHC; FALSE_NEG.			
KW	MHC_I; Transmembrane; Glycoprotein.			
FT	DOMAIN	25	114	EXTRACELLULAR ALPHA-1.
FT	DOMAIN	115	206	EXTRACELLULAR ALPHA-2.
FT	DOMAIN	207	298	EXTRACELLULAR ALPHA-3.
FT	TRANSMEM	299	308	CONNECTING PEPTIDE.
FT	TRANSMEM	309	333	CYTOSMATIC TAIL.
FT	DOMAIN	334	366	CYTOSMATIC TAIL.
FT	DISULFID	125	188	BY SIMILARITY.
FT	DISULFID	227	283	BY SIMILARITY.
FT	CARBOHYD	110	110	N-LINKED (GLCNAC- <i>n</i> ) (BY SIMILARITY).
SQ	SEQUENCE	366 AA;	40954 MW;	05E159364C769FC5 CRC64;
Query Match	2.6%	Score 8;	DB 1;	Length 366;
Best Local Similarity	100.0%	Pred. No. 3.5;		
Matches	8;	Conservative 0;	Mismatches 0;	Indels 0;
		Gaps 0;		

GenCore version 4.5  
Copyright (c) 1993 - 2000 Compugen Ltd.

OM protein - protein search, using sw model  
Run on: September 19, 2002, 17:44:45 ; Search time 48:09 Seconds  
(without alignments)  
1115.168 Million cell updates/sec

Title: US-09-524-531C-15

Perfect score: 310  
Sequence: 1 MALRPPPLCARLUPDFLL.....VNYIRTDEGGDFRKHSFVI 310

Scoring table: OLIGO  
Gapop 60.0 , Gapext 60.0

Searched: 562222 seqs, 172994929 residues  
size : 0

Total number of hits satisfying chosen parameters: 562222  
Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Listing first 75 summaries

Database : SPTREMBL\_19:  
1: sp\_archaea:  
2: sp\_bacteria:  
3: sp\_fungi:  
4: sp\_human:  
5: sp\_invertebrate:  
6: sp\_mammal:  
7: sp\_mhc:  
8: sp\_organelle:  
9: sp\_phage:  
10: sp\_plant:  
11: sp\_rabbit:  
12: sp\_virus:  
13: sp\_vertebrate:  
14: sp\_unclassified:  
15: sp\_virus:  
16: sp\_bacteria:  
17: sp\_archeap:  
  
Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match Length	DB ID	Description
1	310	100.0	310 4 Q9BX67	Q9bx67 homo sapien
2	208	67.1	309 4 Q9FEU1	Q9feu1 homo sapien
3	32	10.3	310 11 Q9DBB7	Q9dbb7 mus musculus
4	28	9.0	310 11 Q9EPK4	Q9epk4 mus musculus
5	28	9.0	310 11 Q9D1M9	Q9d1m9 mus musculus
6	8	2.6	39 7 Q9TNT2	Q9tnnt2 homo sapien
7	8	2.6	80 5 P81793	P81793 phoneutria
8	8	2.6	125 11 Q9PS62	Q9ps62 mus musculus
9	8	2.6	233 10 Q9LR49	Q9lra49 arabidopsis
10	8	2.6	246 5 Q966C0	Q966c0 caenorhabditis
11	8	2.6	290 7 Q299G0	Q299g0 homo sapien
12	8	2.6	294 16 Q9BEG9	Q9beg9 rhizobium l
13	8	2.6	309 5 Q9N4Y9	Q9n4y9 caenorhabditis
14	8	2.6	313 7 Q9M3J1	Q9m3j1 homo sapien
15	8	2.6	322 2 Q9RP17	Q9rp17 desulfobactera
16	8	2.6	336 10 Q9C7E9	Q9c7e9 arabidopsis

GN JAM-2.  
 OS Homo sapiens (Human).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
 RN [1] NCBI\_TAXID=9606;  
 RP TISSUE=BRAIN;  
 RA Cunningham S.A., Arrate M.P., Tran T.M.;  
 RT "Cloning of Human Junctional Adhesion Molecule 3.";  
 RL Submitted (MAR-2001) to the EMBL/GenBank/DDJB databases.  
 RN [2] SEQUENCE FROM N A.  
 RT Aurand-Lions M.A., Johnson-leger C., Wong C., Durasquier L.;  
 RT "Heterogeneity of endothelial junctions is reflected by differential  
 expression and specific subcellular localization of the three JAM  
 family members";  
 RL Submitted (AUG-2001) to the EMBL/GenBank/DDJB databases.  
 RN [3] SEQUENCE FROM N A.  
 Aurand-Lions M.A., Johnson-leger C., Lamagna C., Ozaki H., Kita T.;  
 "Junctional adhesion molecules (JAMs), and interendothelial  
 junctions";  
 RL Submitted (AUG-2001) to the EMBL/GenBank/DDJB databases.  
 DR EMBL: AF256518; AAK7221\_1; -.  
 EMBL: AJ44431; CAA69645\_1; -.  
 DR InterPro; IPR003598; Ig\_c2.  
 DR InterPro; IPR03606; Ig-like.  
 DR InterPro; IPR03006; Ig\_MHC.  
 DR Pfam; PF00047; ig\_2.  
 DR SMART; SM00408; Ig\_2.  
 DR SMART; SM00410; Ig\_3-like; 1.  
 KW Immunoglobulin domain; Signal.  
 FT SIGNAL 1 30 AA; 35020 MN; CB39AD33EA1DAB9 CRC64;  
 SQ SEQUENCE 310 AA;  
 Query Match 100.0%; Score 310; DB 4; Length 310;  
 Best Local Similarity 100.0%; Pred. No. 0; Mismatches 0; Matches 310; Conservative 0; Gaps 0; Indels 0; Gaps 0;  
 Db 1 MAURRPPRLCARLPFFLLFRLGCLIGAVNLKSSNRTPVQFESVELGGIITQS 60  
 Qy 61 SPRRIEKKIQDEQTYVFDNKIQGDLAGRAEILGKSLKIWNVRDSALYCEVAR 120  
 61 SPRRIEKKIQDEQTYVFDNKIQGDLAGRAEILGKSLKIWNVRDSALYCEVAR 120  
 Qy 121 NDREKEIDEIVELTVQVKPVCRPKAVPKMATHCQESEGHRPHYSWYRDVPL 180  
 121 NDREKEIDEIVELTVQVKPVCRPKAVPKMATHCQESEGHRPHYSWYRDVPL 180  
 Qy 181 PTDSSRAMPFRNSSEFHNSEGTGLTFTAVHKDDSGQYCYIASNDASARCEEQEMEVYL 240  
 181 PTDSSRAMPFRNSSEFHNSEGTGLTFTAVHKDDSGQYCYIASNDASARCEEQEMEVYL 240  
 Db 241 NIGGIGGVVLVALIALITLGICCAVRYGFINNKQDGESYKNGPKPDGVNYIRTDEEG 300  
 241 NIGGIGGVVLVALIALITLGICCAVRYGFINNKQDGESYKNGPKPDGVNYIRTDEEG 300  
 Db 301 DFRHKSSFVVI 310  
 Qy 301 DFRHKSSFVVI 310  
 Db 301 DFRHKSSFVVI 310  
 RESULT 2  
 Qy 096F11 PRELIMINARY; PRT; 309 AA.  
 RN [1] SEQUENCE FROM N A.  
 RC STRAIN=C57BL/6J; TISSUE=SMALL INTESTINE;  
 RX MEDLINE=21021851; PubMed=11217851;  
 RA Kawai J., Shingawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,  
 RA Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,  
 RA Mizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamamoto I.,  
 RA Saito T., Okazaki Y., Gotohori T., Bono H., Kasukawa T., Saito Y.,  
 RA Kadora K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,  
 RA Fleischmann W., Gaasterland T., Gisgi C., King B., Kochiwa H.,  
 RA Kuehl P., Lewis S., Matsui Y., Nitaido H., Pesole G., Quackenbush J.,  
 RA Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,  
 RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,  
 RA Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,  
 RESULT 2  
 Qy 096F11 PRELIMINARY; PRT; 309 AA.  
 Db 01-DEC-2001 (TREMBlrel. 19, Last sequence update)  
 DT 01-DEC-2001 (TREMBlrel. 19, Last annotation update)  
 DE UNKNOWN (PROTEIN FOR IMAGE:3875338) (FRAGMENT).  
 OC Homo sapiens (Human).  
 OC Mammalia; Eutheria; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC TISSUE-EYE, AND RETINOBLASTOMA;  
 RA Selausberg R.;  
 RL Submitted (JUL-2001) to the EMBL/GenBank/DDJB databases.  
 DR EMBL: BC010690; AAH10690\_1; -.  
 FT NON\_TER 1 1  
 SQ SEQUENCE 309 AA; 34917 MW; 50C5B1B7872E8DF3 CRC64;





XX  
 XX  
 PT Ashkenazi AJ, Baker KP, Goddard A, Gurney AL, Hebert C, Henzel W;  
 PT kabakoff RC, Lu Y, Pan J, Pennica D, Shelton DL, Smith V;  
 PI Stewart TA, Tunas D, Watanabe CK, Wood WI, Yan M;  
 XX  
 XX  
 DR WPI; 2000-572271/53.  
 DR N-PSDB; AAC58622.

XX  
 PT Sixty four PRO polypeptides, useful in the diagnosis and treatment of  
 PR immune related disorders, e.g. systemic lupus erythematosis, rheumatoid  
 PR arthritis, osteoarthritis, thyroiditis and diabetes mellitus -  
 XX  
 PS Claim 33; FIG 8B; 309pp; English.

XX  
 CC The present invention describes sixty four human PRO proteins which can  
 be used in the treatment of immune related diseases. The human PRO  
 proteins, anti-PRO antibodies, agonists and antagonists are useful for  
 treating and diagnosing immune related disorders. The disorders are  
 selected from systemic lupus erythematosis, rheumatoid arthritis,  
 osteoarthritis, juvenile chronic arthritis, spondyloarthropathies,  
 systemic sclerosis, idiopathic inflammatory myopathies, Sjogren's  
 syndrome, systemic vasculitis, sarcoidosis, autoimmune haemolytic  
 anaemia, autoimmune thrombocytopaenia, thyroiditis, diabetes mellitus,  
 immune-mediated renal disease, demyelinating diseases of the central  
 and peripheral nervous systems, hepatobiliary diseases, inflammatory  
 bowel disease, gluten-sensitive enteropathy and Whipple's disease,  
 CC autoimmune or immune-mediated skin diseases, allergic diseases,  
 immunological diseases of the lung, and transplantation associated  
 diseases including graft rejection and graft-versus-host-disease.  
 CC AAC58597 to AAC58578 represent PCR primers and hybridization probes used  
 CC in the isolation of human PRO sequences. AAC58579 to AAC58642 and  
 CC AAC58314 to AAC58347 represent human PRO polynucleotide and protein  
 XX sequences given in the exemplification of the present invention.

SQ Sequence 310 AA;

Query	Match	100.0%	Score	310;	DB	21;	Length	310;
Best	Local Similarity	100.0%	Pred.	No.	1.	7e-295;	Mismatches	0;
Matches	310;	Conservative	0;	Indels	0;	Gaps	0;	
Db	1	MLARRPPRLRICARLDDFLLLFRCLIGAVNLKSSNRTPVQEFSVELSCITDSQT	60					
Oy	61	SPRIRWKKIDDEOTYVFENKICDLAGAEELGKTSIKNWVTRDSALYRCVAR	120					
Db	61	sdprirwkkiddeotyvfenkicdlagaeelgktsiknwvtrdsalycvar	120					
Db	121	NDRKEDEIVELTVQVKPVPVCRPKAVPGKMATLHCOSEGHPRPHYSWYRDVPL	180					
Db	121	ndrkeideiveltvqvkpvtpvcrpkavpgkmatlhcseqegiprphyswryndvpl	180					
Oy	181	PTDSRANPRFRNSFHLNSEGTGLVTAVHKDDSGOYCYLASNDAGSARCEEEQEMEVYL	240					
Db	181	ptdsranprfrnsfhlnsgetglvtavhkdsgoyciasndagsarceeqemevyl	240					
Oy	241	NGGGGGVGVVLAVALIALITIGICCAYRGYFFINNODGESYKKNPCKPDGYNYIRDEEG	300					
Db	241	ngggggvvvvlaavalialitigiccayrgyffinndgesyknppckpdgynyirtdeeg	300					
Oy	301	DPRHKSSFVI	310					
Db	301	dfrhkssfv1	310					
RESULT	3							
AAV96735								
ID	AAV96735	standard; protein;	310 AA.					
XX								
AC	AAV96735;							
XX								
DT	26-SEP-2000	(first entry)						

Query Match 100.0%; Score 310; DB 21; Length 310;  
 Best Local Similarity 100.0%; Pred. No. 1. 7e-295; Mismatches 0; Indels 0; Gaps 0;  
 Matches 310; Conservative 0; Domains 0; Key peptide 1.30 /label= signal\_peptide  
 PS Modified-site 26.31 /note= "N-myristoylation site"  
 FT Modified-site 69..77 /note= "Tyrrosine kinase phosphorylation site"  
 FT Modified-site 104..107 /note= "N-glycosylation site"  
 FT Modified-site 106..109 /note= "casein kinase II phosphorylation site"  
 FT Modified-site 107..110 /note= "N-glycosylation site"  
 FT Modified-site 192..195 /note= "camp- and cGMP-dependent protein kinase"  
 FT Modified-site 215..220 /note= "N-myristoylation site"  
 FT Modified-site 226..231 /note= "N-myristoylation site"  
 FT Domain 243..263 /label= "transmembrane\_domain"  
 FT Modified-site 243..248 /note= "N-myristoylation site"  
 FT Modified-site 244..249 /note= "N-myristoylation site"  
 FT Modified-site 262..267 /note= "N-myristoylation site"  
 FT Modified-site 296..299 /note= "N-myristoylation site"  
 FT Modified-site /note= "casein kinase II phosphorylation site"  
 FT Key peptide /note= "N-myristoylation site"  
 XX PN WO200036102-A2.  
 XX PD 22-JUN-2000.  
 XX PP 01-DEC-1999; 99WO-US28634.  
 PR 16-DEC-1998; 98US-0112851.  
 PR 16-DEC-1998; 98US-011345.  
 PR 22-DEC-1998; 98US-011351.  
 PR 12-JAN-1999; 99US-011558.  
 PR 12-JAN-1999; 99US-011565.  
 PR 12-JAN-1999; 99US-011573.  
 PR 09-FEB-1999; 99US-0119341.  
 PR 10-FEB-1999; 99US-011937.  
 PR 12-FEB-1999; 99US-011965.  
 PR 02-JUN-1999; 99WO-US12252.  
 XX PA (GETH ) GENENTECH INC.  
 XX PI Bottstein D, Desnoyers L, Ferrara N, Fong S, Gao W, Goddard A;  
 PI Gurney AL, Pan J, Roy MA, Stewart TA, Tunas D, Watanabe CK;  
 PI Wood WI;  
 XX DR WPI; 2000-431586/37.  
 XX DR N-PSDB; AAA51265.  
 XX PT Isolated nucleic acid molecule encodes a PRO polypeptide which is a  
 PT transmembrane polypeptide  
 XX PS Claim 1; FIG 14; 154pp; English.  
 XX OC This is PRO1868, a putative homologue of A33 antigen, a known  
 CC colorectal cancer-associated marker. The invention concerns novel  
 CC secreted and transmembrane proteins, designated PRO polypeptides. The



PA 3 (HELI-) HELIX RES INST.  
 XX  
 PI Ota T, Nishikawa T, Isogai T, Hayashi K, Ishii S, Kawai Y;  
 PI Wakamatsu A, Sugiyama T, Nagai K, Kojima S, Otsuki T, Koga H;  
 XX  
 DR WPI: 2001-524255/58.  
 DR N PSDB; AAK94867.

XX  
 PR 830 Primers useful for synthesizing full length cDNA clones and their  
 use in genetic manipulation -  
 XX  
 PS Claim 8; SEQ ID NO 4051; 1380pp + sequence listing; English.

XX  
 CC The invention relates to primers for synthesizing full length cDNA  
 clones. 830 cDNA molecules encoding a human protein have been  
 isolated and nucleotide sequences of 5'- and 3'-ends of the cDNA  
 molecules have been determined. Primers for synthesizing the full length  
 cDNA are useful for clarifying the function of the protein encoded by  
 the cDNA. The full length clones were obtained by construction of full  
 length enriched cDNA libraries that were synthesised by the oligo-capping  
 method. The primers enable the production of the full length cDNA easily  
 without any special methods. The present sequence is a polypeptide  
 encoded by a full length human cDNA of the invention.

CC Note: The sequence data for this patent did not form part of the printed  
 specification, but was obtained in CD-ROM format directly from EPO.

CC XX Sequence 310 AA;

Query Match 100.0%; Score 310; DB 22; Length 310;  
 Best Local Similarity 100.0%; Pred. No. 1; 7e-25; DB Matches 310; Conservative 0; Mismatches 0; Indels 0; Gaps 0; PR  
 OY 1 MALRRPPRLRCLALPDPFLILFRGCLIGAVNLKSSNRTPVQEVSELSCLRDST 60  
 DB 1 malrrpprlrclalpdpflilfrgcligavnlksnrtpvqefsevsclitcs 60  
 PA  
 OY 61 SPRIENKKIQEQTTVFFDKIQGDLAGRBLGKTSKVNTRDSALYCEVAR 120  
 DB 61 spriewkkiqeqttvffdkiqgdlagrblgktskvntrdsalycevar 120  
 OY 121 NRKEIDEVISLTVOVKPVTPVCVRKAVPKGMATLHCOTSEGHHRPHYSWYNDVPL 180  
 DB 121 nrkeidevlvtvqkpvtpvcvrpkavpgkmatlhcqseghhrphyswyrndvpl 180  
 DR  
 OY 181 PDSRAMPFRRSSFHNLNSEGTFLVEFAVHKPSGORYCIAASDAGSARCEQEMEYDL 240  
 DB 181 pdsrampfrssfhnlsetctlfavhkpsgoryciasdagsarceqemeydl 240  
 PA  
 OY 241 NTGGIGGVVLVALALITLGICCAVRRGYFINNKODGESKNPGPDGVWIRDEEG 300  
 DB 241 ntggiggvvlvalalitlgiccaavrgrgyfinnkodgesknpgpdgvwyirdeeg 300  
 OY 301 DRHKSSFVI 310  
 DB 301 drhkssfvi 310  
 RESULT 6  
 AAU12440 Human PRO1868 polypeptide sequence.  
 ID AAU12440 standard; Protein; 310 AA.  
 AC  
 XX AAU12440;  
 DT 24-OCT-2001 (first entry)  
 XX  
 DE Human PRO1868 polypeptide sequence.  
 XX  
 Human secretory and transmembrane; PRO; mammalian; cancer; lung;  
 breast; prostate; cervical; tumour necrosis factor-alpha; TNF-alpha;  
 cartilage; ear; proliferation; glucose; free fatty acid; skeletal muscle;  
 adipocyte; A-peptide; factor VIIA; gene therapy.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200140466-A2.  
 XX  
 PD 07-JUN-2001.  
 XX  
 PR 01-DEC-2000; 2000WO-US32678.  
 XX  
 PR 01-DEC-1999; 99WO-US28301.  
 PR 01-DEC-1999; 99WO-US28634.  
 PR 02-DEC-1999; 99WO-US28551.  
 PR 02-DEC-1999; 99WO-US28564.  
 PR 02-DEC-1999; 99WO-US28565.  
 PR 09-DEC-1999; 99US-0170262.  
 PR 16-DEC-1999; 99WO-US30095.  
 PR 20-DEC-1999; 99WO-US30911.  
 PR 20-DEC-1999; 99WO-US30999.  
 PR 30-DEC-1999; 99WO-US1243.  
 PR 06-JAN-2000; 2000WO-US0277.  
 PR 06-JAN-2000; 2000WO-US0376.  
 PR 11-FEB-2000; 2000WO-US31365.  
 PR 18-FEB-2000; 2000WO-US04341.  
 PR 18-FEB-2000; 2000WO-US04342.  
 PR 22-FEB-2000; 2000WO-US04414.  
 PR 24-FEB-2000; 2000WO-US04914.  
 PR 24-FEB-2000; 2000WO-US05004.  
 PR 01-MAR-2000; 2000WO-US05601.  
 PR 20-MAR-2000; 2000WO-US07377.  
 PR 21-MAR-2000; 2000WO-US07532.  
 PR 30-MAR-2000; 2000WO-US08439.  
 PR 17-MAY-2000; 2000WO-US13705.  
 PR 22-MAY-2000; 2000WO-US14042.  
 PR 30-MAY-2000; 2000WO-US14941.  
 PR 02-JUN-2000; 2000WO-US15264.  
 PR 10-NOV-2000; 2000WO-US30873.  
 XX  
 PA (GTH ) GENENTECH INC.  
 XX  
 PT Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;  
 PT Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;  
 PT Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;  
 XX  
 DR WPI: 2001-408281/43.  
 DR N PSDB; AAS21512.  
 XX  
 PT Isolated, secretory and transmembrane PRO polypeptide used to detect  
 other PRO polypeptides, link biactive molecules to cells expressing  
 PRO polypeptides, and detect the presence of mammalian tumours  
 e.g. lung, breast, prostate, cervical  
 XX  
 PS Claim 12; Fig 53B; 813pp; English.  
 XX  
 AAU12172-AAU12446 represent novel, human secretory and transmembrane  
 PRO polypeptides. The PRO polypeptides are useful to detect other  
 PRO polypeptides, to modulate biological activities of cells expressing  
 PRO polypeptides, and to detect the presence of mammalian lung, colon,  
 breast, prostate, rectal, cervical or liver tumours by comparing PRO  
 polypeptide expression in a cell sample to that in a control sample.  
 Some of the 275 sequences are also useful to stimulate the release of  
 tumour necrosis factor-alpha (TNF-alpha) from human blood, the  
 proliferation or differentiation of chondrocytes, the proliferation or  
 gene expression in pericyte cells, the proliferation of proteoglycans from  
 cartilage, the proliferation of inner ear utricular supporting cells or  
 of T-lymphocytes, the release of a cytokine from peripheral blood  
 monocytes (PBMCs), or the proliferation of endothelial cells. Some of  
 the PRO polypeptides may modulate glucose or free fatty acid uptake by  
 skeletal muscle cells or by adipocytes; or inhibit binding of A-peptide  
 to factor VIIA. The PRO polypeptides can be used in assays to identify  
 molecules involved in binding interactions. The polynucleotides encoding  
 PRO polypeptides can be used to generate probes, antisense RNA/DNA,  
 transgenic or knock out animals and can be used in gene therapy.

SQ	Sequence	310 AA;
QY	1 MAIRRPPRILCARLDPFLLIFRGCLIGAVNLKSSNRTPVQEFESVELSCITDSQT	60
Db	1 mailrpprlicarlpdfllifrgcligavnlksnrtpvqefesvelscitdsqt	60
QY	61 SDPRIEWKKIODEQTYFEDNKIQDLAGRAELGKTSLSKIKWNTRDSALYCEVAR	120
Db	61 sdpriewkkidqdeqtyffdnkifqdglaagraelgktslskikwntrdsalycevar	120
QY	121 NDRKEIDEVIELTQVKVTCPICRVPKAVPKVMATLHQCESEGHPRPHYSWRNDVPL	180
Db	121 ndrkeidevieltvqvkvtcpicrvpkavpkvmatlhqcesegphprphyswryndpl	180
QY	181 PTDSRANPFRNSFHLNSETGTIVFTAVHKDDSGQYCIA SNDAGSARCEEOMEVYDL	240
Db	181 ptdsransprfrnsfhlisetgtivftavhkddsgqycciasndagsarceeqemeydl	240
QY	241 NIGGIGGVLVLAVALITLGCCAYRGYFINKQDGESYKNPGKDGVNYIRTEEG	300
Db	241 niggiggylvlavaitlgccayrgyfinkqdgesyknpgkpdkgvnyirtdeeg	300
QY	301 DFRIKSSFV1 310	
Db	301 dfrkssfv1 310	
SQ	Sequence	310 AA;
RESULT	7	
ID	AAB80272 standard; Protein; 310 AA.	
XX		
AC	AAB80272;	
XX		
DT	24-APR-2001 (first entry)	
DE	Human PRO1868 protein.	
XX		
KW	Human; PRO; dermatological; antipsoriatic; cytostatic; antiinflammatory; anti-parkinsonian; neurotropic; neuroprotective; vulnerary; cordiant; antiangiogenic; vasotrophic; antiasthmatic; cancer; antiarthritic; antinefertility; antidiabetic; antiviral; diabetes; ophthalmologic; gene therapy; skin disease; gastrointestinal disorder; ischaemia; inflammation.	
CC	Homo sapiens.	
XX	WO20010311-A1.	
XX		
PD	18-JAN-2001.	
XX		
PF	22-FEB-2000; 2000040-US04414.	
XX		
PR	07-JUL-1999; 990S-0143048.	
PR	26-JUL-1999; 990S-0145698.	
PR	28-JUL-1999; 990S-016222.	
PR	08-SEP-1999; 990S-US20594.	
PR	13-SEP-1999; 990S-US20944.	
PR	15-SEP-1999; 990S-US21090.	
PR	15-SEP-1999; 990S-US21547.	
PR	05-OCT-1999; 990S-US23089.	
PR	29-NOV-1999; 990S-US28214.	
PR	30-NOV-1999; 990S-US28313.	
PR	16-DEC-1999; 990S-US30095.	
PR	20-DEC-1999; 990S-US30911.	
PR	20-DEC-1999; 990S-US30999.	
PR	05-JAN-2000; 990S-US00219.	
XX		
PA	(GEPI ) GENERETECH INC.	
RESULT	8	
ID	AAB80383 standard; protein; 310 AA.	
XX		
AC	AAB80383;	
XX		
DT	24-APR-2001 (first entry)	
XX		
DE	Secreted protein encoded by gene #13.	
XX		
KW	Secreted protein; human; autoimmune; hyperproliferation;	
XX		
XN	Ashkenazi AJ, Botstein D, Desnoyers L, Baton DL, Ferrara N; Flavaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A; Gorski PJ, Grimaldi CJ, Gurney AL, Hillan KJ, Kljavin IJ; Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D; Williams PM, Wood WI;	
PI	WPT; 2001-081051/09.	
DR	N-PSSDB; AAF72433.	
XX		
PT	Sixty one nucleic acids encoding PRO polypeptides which are useful in the treatment of skin diseases (e.g. psoriasis), cancers (e.g. lung squamous cell carcinoma) and neurodegenerative diseases (e.g. Alzheimer's disease).	
PT		
PS	Claim 1; Fig 124; 393PP; English.	
XX		
CC	The present sequence is one of sixty one novel secreted and transmembrane PRO polypeptides. The PRO polypeptides are useful for treating skin diseases (e.g. psoriasis), cancers (e.g. lung squamous cell carcinoma), gastrointestinal disorders (e.g. enterocolitis), neurodegenerative diseases (e.g. Alzheimer's disease, Parkinson's disease), wound repair, cardiovascular disorders (e.g. endometrial bleeding, angiogenesis, ischaemias such as coronary ischaemia, atherosclerosis), inflammatory disorders (e.g. asthma, rhinitis, arthritis, multiple sclerosis), infertility, AIDS and diabetes and retinal disorders such as retinitis pigmentosum. The PRO nucleic acids have applications in molecular biology, including use as hybridization probes, and in chromosome and gene mapping.	
CC		
XX		
RESULT	9	
ID	AAB80383 standard; protein; 310 AA.	
XX		
AC	AAB80383;	
XX		
DT	24-APR-2001 (first entry)	
XX		
DE	Secreted protein encoded by gene #13.	
XX		



AAB80409	ID	301 dfrkssfv 310
XX	XX	
AC	AC	
RAB80409;		
XX	XX	
DT	24-APR-2001 (first entry)	
XX	DE	Secreted protein encoded by gene #39.
KW	KW	Secreted protein; human; autoimmune; hyperproliferation;
KW	KW	cardiovascular; cerebrovascular; infection; food.
XX	XX	Homo sapiens.
OS	OS	
XX	XX	
PN	PN	WO200107459-A1.
XX	XX	
PD	PD	01-FEB-2001.
XX	XX	
PR	PR	20-JUL-2000; 2000WO-US19735.
XX	XX	
PA	PA	23-JUL-1999; 99US-0145220.
XX	XX	
(HUMA-) HUMAN GENOME SCI INC.		
XX	XX	
PT	PT	Rosen CA, Ruben SM, Ebner R, Duan RD, Ni J, Soppet DR, Moore PA;
PI	PI	Shi Y, Lafleur DW, Olsen HS, Birse CE, Komatsoulis GA;
XX	XX	
WPI:	WPI:	2001-123261/13.
XX	XX	
PT	PT	New isolated nucleic acid encoding 29 secreted proteins, for diagnosing, preventing and treating e.g. autoimmune, hyperproliferative, cardiovascular, and ocular diseases or disorders and microorganism infections
PT	PT	CC
DR	DR	Claim 11: Page 559-560; 601pp; English.
XX	XX	
CC	CC	The present invention relates to 29 human secreted proteins. The invention is used to prevent autoimmune diseases e.g. rheumatoid arthritis, hyperproliferative disorders e.g. neoplasms of the breast or liver, cardiovascular disorders e.g. cardiac arrest, cerebrovascular disorders e.g. cerebral ischemia, angiogenesis, nervous system disorders e.g. Alzheimer's disease, infections caused by bacteria, viruses and fungi and ocular disorders e.g. corneal infection. Also used in food preparations.
CC	CC	Sequence 310 AA;
XX	XX	Query Match 100.0%; Score 310; DB 23; Length 310; Best Local Similarity 100.0%; Pred. No. 1.7e-25; Mismatches 310; Conservative 0; Indels 0; Gaps 0;
QY	QY	1 MAIRRPPRLCARLPDFELLFLFRGCLIGAVNLKSSNRTPTVQEFESVELSCIRTSQ 60
Db	Db	1 mairrpprlcarlpdfellflfrgcligavnlksnrtptvqefesvelscitdsqt 60
QY	QY	61 SDPRIEWKIQDQQTIVFEDNLQIGDLAGRAEILGTSKINWTRDSALYCEVAR 120
Db	Db	61 sdpriewkigdqqtivffankiqdlagraeilgtsklnwtrdsalycevar 120
QY	QY	121 NDKREKIDIVIENIVQVKPVTIPCRVKAQPVKGMATLQESSEGHRRPHYSWRNQPL 180
Db	Db	121 ndkeidiviesqvqkpvpcrvkavpqkmatlqeseghpphywvndpl 180
QY	QY	181 PTTSRANPRFRNSPFHLMSETGTQVFTAVHKDQSQYCIAISDAGSARCECMEYDDL 240
Db	Db	181 pttsranprfrnsfhlmsetgtqvftavhkddsqyqyciasdagasarcedemeydl 240
QY	QY	1 241 NIGGIIGGVLYLAVLAITLGCCAYRRGYFVNPKDQGESTKNPKGPDGVWVIRTEEG 300
Db	Db	241 niggiggyvlwialialitlgccayrrgyfinkqdgesyknpgpdgvnyirtdeeg 300
QY	QY	301.DFRHKSFRV 310
DB	DB	
Best Local Similarity	Best Local Similarity	100.0%; Pred. No. 1.7e-25; Mismatches 310; Conservative 0; Indels 0; Gaps 0;
QY	QY	1 MAIRRPPRLCARLPDFELLFLFRGCLIGAVNLKSSNRTPTVQEFESVELSCIRTSQ 60
Db	Db	1 mairrpprlcarlpdfellflfrgcligavnlksnrtptvqefesvelscitdsqt 60





OS Homo sapiens.

XX

FH Location/Qualifiers

FT Key 1..30

FT peptide /label= signal\_peptide

FT Protein 31..310

FT /label= IGFAF-6 46..117

FT Domain /label= Ig\_domain 153..221

FT Domain /label= Ig\_domain 238..260

FT /label= transmembrane\_domain

XX WO20029583-A2.

XX PN

XX PD 25-MAY-2000.

XX PF 19-NOV-1999; 99WO-US27566.

XX PR 22-DEC-1998; 99US-0113635.

XX PR 07-APR-1999; 99US-0128194.

XX PA (INCY-) INCYTE PHARM INC.

XX PI Yue H, Tang YT, Corley NC, Guebler KJ, Gorgone GA, Baughn MR;

PI Lu DM, Lai P, Hillman JL, Yang J;

XX DR WPI; 2000-387796/33.

DR N-PSDB; AAA27386.

XX PT Immunoglobulin superfamily proteins, the agonist and antagonist of the protein is useful for preventing and treating disorders associated with altered levels of the protein such as cancer, immune system disorders

PT

XX PS Claim 1; Page 82-83; 105pp; English.

CC The present sequence is the human immunoglobulin superfamily protein CC IgFAM-6. Its gene was isolated from a cDNA library of leg tissue. It is expressed in reproductive, nervous and cardiovascular tissue, where cancer and inflammation are common. The gene, protein, its antibodies, agonists and antagonists are suitable for diagnosing and treating many diseases, including cancer, immune system disorders (such as inflammation, AIDS, allergies, anaemia, arteriosclerosis, asthma, atherosclerosis, chole cystitis, Crohn's disease, diabetes mellitus, emphysema, Graves' disease, hepatitis, multiple sclerosis, psoriasis, rheumatoid arthritis, scleroderma, systemic lupus erythematosus and ulcerative colitis), complications of cancer, haemodialysis and extracorporeal circulation, trauma and haematopoietic cancer (such as leukaemia) and infections caused by bacteria, viruses, fungi or parasites.

CC XX SQ Sequence 310 AA;

Query Match 67.4%; Score 209; DB 21; Length 310; Best Local Similarity 99.7%; Pred. No. 1.8e-196; Matches 309; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 MALARPPRPLRLCARLUPDFULLFRGCLIGAVNLKSSNRTPVQDEFESVLSCLITDSQ 60

Db 1 malrrprplrlcarlupdfullfrgcligavnlksnrtpvqefesvlsciltsq 60

Qy 61 SDPRIEWKKIODEQTYYVFENDNKGDLAGRAEILGKTSKIKWNTTRDSSALYRCVAR 120

Db 61 sdpiewkkqdeqttyvfendnkqdlagraeilgktskikwnttrdsalycvar 120

Qy 121 NDREKEDEIVELTIVQVKPVPVCRPKAVPGKMATLHQSEGHPRPHRYSWYRNQVPL 180

Db 121 ndrkeideiveltivqvkptpvcvapkavpgkmatlqeqeseqphrphyswvndpl 180

---

RESULT 16

OY 181 PTDSRANPRRNSSFHNLNEGTGLVFTAWKHDSSQYKICASNDAGSARCEEQEMEVIDL 240

ID AAB39254

ID AAB39254 standard; Protein: 285 aa.

XX DT 02-FEB-2001 (first entry)

XX DE Human secreted protein sequence encoded by gene 15 SEQ ID NO:134.

XX KW Human; secreted protein; immunosuppressive; antiarthritic; antirheumatic; antiproliferative; cytostatic; cardiant; vasotropic; cerebroprotective; nootropic; neuroprotective; antibacterial; virucide; fungicide; neoplasm; ophthalmological; autoimmune disease; rheumatoic arthritis; infection; angiogenesis; hyperproliferative disorder; cardiovascular disorder; infection; cerebrovascular disorder; nervous system disorder; ocular disorder; wound healing; chemotaxis.

XX OS Homo sapiens.

XX PN WO200056754-A1.

XX PD 28-SEP-2000.

XX PF 16-MAR-2000; 2000WO-US06792.

XX PR 19-MAR-1999; 99US-0123362.

XX PR 10-DEC-1999; 99US-0169980.

XX PA (HUMA-) HUMAN GENOME SCI INC.

XX PI Rosen GA, Ruben SM, Komatsoulis G;

XX DR WPI; 2000-57943/54.

DR N-PSDB; AAC74237.

XX PT Isolated nucleic acid molecule encoding a human secreted protein is used in preventing, treating or ameliorating a medical condition

XX Disclosure; Page 32; 434pp; English.

XX CC The polynucleotide sequences given in AAC74233-C4279 encode the human secreted proteins represented in AAC39179-B39226. Sequences AAC39227-B39308 are alternative proteins encoded by the genes, and also protein sequences with which they share homology. The proteins have activities based on the tissues and cells in which they are expressed. Examples of activities include: immunosuppressive; antiarthritic; antirheumatic; antiproliferative; cytostatic; cardiant; vasotropic; cerebroprotective; fungicide; and ophthalmological. The human secreted proteins, polynucleotides, antagonists and agonists of the invention may be useful in the treatment, prevention, and/or diagnosis of various disease disorders and conditions such as autoimmune diseases e.g. rheumatoid arthritis, hyperproliferative disorders e.g. neoplasms of the breast or liver, cardiovascular disorders e.g. cardiac arrest, cerebrovascular disorders e.g. cerebral ischaemia, angiogenesis, nervous system disorders e.g. Alzheimer's disease, infections caused by bacteria, viruses and fungi and ocular disorders e.g. corneal infection. The polynucleotides can also be used to aid wound healing and epithelial cell proliferation, to regenerate tissues, maintain organs before transplantation, in

CC chemotaxis and as a food additive or preservative e.g. to increase  
 CC storage capabilities. Sequences AAC74214-C74222 and LAB30178 are used  
 CC during the isolation and characterisation of the genes of the invention.  
 XX Sequence 285 AA;

Query Match 51.9%; Score 161; DB 21; Length 285;  
 Best Local Similarity 100.0%; Pred. No. 2e-149; Matches 161; Conservative 0; Mismatches 0; Indels 0; Gaps 0; SQ

Db 150 VPGKMMATLHQESERGHPRPHYSWYRDVPLPTDSRANPFRNNSFHINSETGLVTAV 209  
 |||||vpgkmmatlhcqesegphphyswyrndvplptdsranprfnssfhinsetglvtav 184  
 125 vpgkmmatlhcqesegphphyswyrndvplptdsranprfnssfhinsetglvtav 184

Qy 210 HKDSDGQYCIASNDASARCBQEMEYDNLNGIGGVVLVLAVALITLGICCAVR 269  
 |||||hkddsgqyciasndasarccqemeydnlngiggvvlvalitlgiccavr 244  
 185 270 GYFINKKODGESYKNPKPDGVNVIRDEEGPRHKSSFVI 310  
 |||||gyfinnkodgesyknpkpdgvyirtdedgdrfkhksfvi 285

Db 245 gyfinnkodgesyknpkpdgvyirtdedgdrfkhksfvi 285

RESULT 17

ID ABG04645 standard; Protein: 291 AA.

AC ABG04645;

XX DT 13-FEB-2002 (first entry)

DE Novel human diagnostic protein #4636.

XX KW Human; chromosome mapping; gene mapping; gene therapy; forensic;  
 food supplement; medical imaging; diagnostic; genetic disorder.

KW XX Homo sapiens.

XX OS WO200175067-A2.

XX PN 11-OCT-2001.

XX PF 30-MAR-2001; 2001WO-US08631.

XX PR 31-MAR-2000; 2000US-0540217.

XX PR 23-AUG-2000; 2000US-0549167.

XX (HYSE-) HYSEQ INC.

XX PT Dumanac RT, Liu C, Tang YT;

XX XX WPT: 2001-639362/73.

XX N-PSDB; AAS8832.

XX New isolated polynucleotide and encoded polypeptides, useful in  
 PT diagnostics, forensics, gene mapping, identification of mutations  
 PT responsible for genetic disorders or other traits and to assess  
 PT biodiversity -

XX PS Claim 20; SEQ ID No 35004; 103pp; English.

XX

The invention relates to isolated polynucleotide (I) and  
 CC polypeptide (II) sequences. (I) is useful as hybridisation probes,  
 CC polymerase chain reaction (PCR) primers, oligomers, and for chromosome  
 CC and gene mapping, and in recombinant production of (II). The  
 CC polynucleotides are also used in diagnostics as expressed sequence tags  
 CC for identifying expressed genes. (I) is useful in gene therapy techniques  
 CC to restore normal activity of (II) or to treat disease states involving  
 CC (II). (II) is useful for generating antibodies against it, detecting or  
 quantitating a polypeptide in tissue, as molecular weight markers and as  
 CC a food supplement. (II) and its binding partners are useful in medical  
 CC imaging of sites expressing (II). (I) and (II) are useful for treating

CC disorders involving aberrant protein expression or biological activity.  
 CC The polypeptide and polynucleotide sequences have applications in  
 CC diagnostics, forensics, gene mapping, identification of mutations  
 CC responsible for genetic disorders or other traits to assess biodiversity  
 CC and to produce other types of data and products dependent on DNA and  
 CC amino acid sequences. ABG0010-ABG3037 represent novel human  
 CC diagnostic amino acid sequences of the invention.  
 Note: The sequence data for this patent did not appear in the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 at [ftp.wipo.int/pub/published\\_pct\\_sequences](http://wipo.int/pub/published_pct_sequences).

XX Sequence 291 AA;

Query Match 48.7%; Score 151; DB 22; Length 291;  
 Best Local Similarity 100.0%; Pred. No. 1 3e-139; Matches 151; Conservative 0; Mismatches 0; Indels 0; Gaps 0; SQ

Qy 87 DIAGRAETIGKTSILKINNTTDSALYRCERVARNDRKEIDEIVELTQVKPVTCRV 146  
 |||||diagraetigktsilkiwttrdsalycervarndrkeideiveltqvkpvtcrv 193

Db 134 diagraetigktsilkiwttrdsalycervarndrkeideiveltqvkpvtcrv 193

Qy 147 PKAVPGKMMATLHQESERGHPRPHYSWYRDVPLPTDSRANPFRNNSFHINSETGLVF 206  
 |||||pkavpgkmmatlhcqesegphphyswyrndvplptdsranprfnssfhinsetglvf 253

Db 194 pkavpgkmmatlhcqesegphphyswyrndvplptdsranprfnssfhinsetglvf 253

Qy 207 TAVHKDDSGQYCIASNDASARCEQEMEV 237  
 |||||tavhkddsgqyciasndasarceeqemev 284

Db 254 tavhkddsgqyciasndasarceeqemev 284

RESULT 18

ID ABG12109 standard; Protein: 404 AA.

XX AC ABG12109;

XX DT 18-FEB-2002 (first entry)

DE Novel human diagnostic protein #12100.

XX KW Human; chromosome mapping; gene mapping; gene therapy; forensic;  
 food supplement; medical imaging; diagnostic; genetic disorder.

KW XX Homo sapiens.

XX OS WO200175067-A2.

XX PD 11-OCT-2001.

XX PF 30-MAR-2001; 2001WO-US08631.

XX PR 31-MAR-2000; 2000US-0540217.

XX PR 23-AUG-2000; 2000US-0549167.

XX (HYSE-) HYSEQ INC.

XX PT Dumanac RT, Liu C, Tang YT;

XX XX WPT: 2001-639362/73.

XX N-PSDB; AAS76296.

XX New isolated polynucleotide and encoded polypeptides, useful in  
 PT diagnostics, forensics, gene mapping, identification of mutations  
 PT responsible for genetic disorders or other traits and to assess  
 PT biodiversity -

XX PS Claim 20; SEQ ID No 42468; 103pp; English.

XX

The invention relates to isolated polynucleotide (I) and  
 CC polypeptide (II) sequences. (I) is useful as hybridisation probes,  
 CC polymerase chain reaction (PCR) primers, oligomers, and for chromosome  
 CC and gene mapping, and in recombinant production of (II). The

Page 13

CC	for identifying expressed genes. (II) is useful in gene therapy techniques to restore normal activity of (II) or to treat disease states involving (II). (II) is useful for generating antibodies against it, detecting or quantitating a polypeptide in tissue, as molecular weight markers and as a food supplement. (II) and its binding partners are useful for treating imaging of sites expressing (II). (I) and (II) are useful for treating disorders involving aberrant protein expression or biological activity.	CC	for identifying expressed genes. (II) is useful in gene therapy techniques to restore normal activity of (II) or to treat disease states involving (II). (II) is useful for generating antibodies against it, detecting or quantitating a polypeptide in tissue, as molecular weight markers and as a food supplement. (II) and its binding partners are useful for treating disorders involving aberrant protein expression or biological activity.	CC	Claim 20: SEQ ID NO 52760; 103pp; English.	
CC	The polypeptide and poly nucleotide sequences have applications in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits to assess biodiversity and to produce other types of data and products dependent on DNA and amino acid sequences. ABG00010-ABG30377 represent novel human diagnostic amino acid sequences or the invention.	CC	The polypeptide and poly nucleotide sequences have applications in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits to assess biodiversity and to produce other types of data and products dependent on DNA and amino acid sequences. ABG00010-ABG30377 represent novel human diagnostic amino acid sequences or the invention.	CC	The invention relates to isolated poly nucleotide (I) and poly peptide (II) sequences. (I) is useful as hybridisation probes, polymerase chain reaction (PCR) primers, oligomers, and for chromosome and gene mapping, and in recombinant production of (II). The poly nucleotides are also used in diagnostics as expressed sequence tags for identifying expressed genes. (I) is useful in gene therapy techniques to restore normal activity of (II) or to treat disease states involving (II). (II) is useful for generating antibodies against it, detecting or quantitating a polypeptide in tissue, as molecular weight markers and as a food supplement. (II) and its binding partners are useful in medical imaging of sites expressing (II). (I) and (II) are useful for treating disorders involving aberrant protein expression or biological activity.	PS
CC	Note: The sequence data for this patent did not appear in the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.	CC	The polypeptide and poly nucleotide sequences have applications in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits to assess biodiversity and to produce other types of data and products dependent on DNA and amino acid sequences. ABG00010-ABG30377 represent novel human diagnostic amino acid sequences or the invention.	CC	The invention relates to isolated poly nucleotide (I) and poly peptide (II) sequences. (I) is useful as hybridisation probes, polymerase chain reaction (PCR) primers, oligomers, and for chromosome and gene mapping, and in recombinant production of (II). The poly nucleotides are also used in diagnostics as expressed sequence tags for identifying expressed genes. (I) is useful in gene therapy techniques to restore normal activity of (II) or to treat disease states involving (II). (II) is useful for generating antibodies against it, detecting or quantitating a polypeptide in tissue, as molecular weight markers and as a food supplement. (II) and its binding partners are useful in medical imaging of sites expressing (II). (I) and (II) are useful for treating disorders involving aberrant protein expression or biological activity.	XX
CC	Sequence 404 AA;	CC	Note: The sequence data for this patent did not appear in the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.	CC	The invention relates to isolated poly nucleotide (I) and poly peptide (II) sequences. (I) is useful as hybridisation probes, polymerase chain reaction (PCR) primers, oligomers, and for chromosome and gene mapping, and in recombinant production of (II). The poly nucleotides are also used in diagnostics as expressed sequence tags for identifying expressed genes. (I) is useful in gene therapy techniques to restore normal activity of (II) or to treat disease states involving (II). (II) is useful for generating antibodies against it, detecting or quantitating a polypeptide in tissue, as molecular weight markers and as a food supplement. (II) and its binding partners are useful in medical imaging of sites expressing (II). (I) and (II) are useful for treating disorders involving aberrant protein expression or biological activity.	XX
SQ	Query Match 48.7%; Score 151; DB 22; Length 404; Best Local Similarity 100.0%; Pred. No. 1.7e-19; Matches 151; Conservative 0; Mismatches 0; Indels 0; Gaps 0; CC	SQ	Query Match 33.5%; Score 104; DB 22; Length 361; Best Local Similarity 100.0%; Pred. No. 1.9e-93; Matches 104; Conservative 0; Mismatches 0; Indels 0; Gaps 0; CC	SQ	Query Match 33.5%; Score 104; DB 22; Length 361; Best Local Similarity 100.0%; Pred. No. 1.9e-93; Matches 104; Conservative 0; Mismatches 0; Indels 0; Gaps 0; CC	XX
Db	134 dlagraeilgktskiwnvtrrdsalyrccevarndkeideividelytqvypvtpwcrv 193	Db	26 GCLIGAVNIKSSNRTPVWQBFESVBLSCITDSQTSDPREWKKTODEQTYYFDNKIQ 85	Db	86 GDLAGRAEILGKTSKIWNTRRDSALYRCCEVARNDKEIDEI 129	XX
QY	147 PKAVPGKMATLHCQSESEGHRPHYSWYRNDVPLPTDSRANPRFRNSFHLUNSETGIVF 206	QY	35 gcligavnikssnrtpvqvfesvelscitdsqtsdpriewkk1qdeqttyfvdnk1q 94	Db	95 gdlagraeilgktskiwnvtrrdsalyrccevarndkeidei 138	XX
Db	194 Pkavpgkmatlhcqseseghrphyswyrndvplptdsrannprfrnsfhlunsetgivf 253	QY	207 TAVHKDPSGOCYCIASNDAGSARCECEMEMV 237	Db	254 tavhkddsgyciasndagsarceeqemev 284	XX
QY	87 DLAGRAMEILGKTSKIWNTRRDSALYRCCEVARNDKEIDEI 146	QY	207 TAVHKDPSGOCYCIASNDAGSARCECEMEMV 237	Db	254 tavhkddsgyciasndagsarceeqemev 284	XX
RESULT	19	RESULT	20	RESULT	20	XX
ID	ABG22401	ID	AY11472	ID	AY11472	XX
ID	ABG22401 standard; Protein: 361 AA.	ID	AY11472 standard; Protein: 89 AA.	ID	AY11472 standard; Protein: 89 AA.	XX
DT	18-FEB-2002 (first entry)	DT	21-JUN-1999 (first entry)	DT	21-JUN-1999 (first entry)	XX
DE	Novel human diagnostic protein #22392.	DE	Human 5' EST secreted protein SEQ ID NO 294.	DE	Human 5' EST secreted protein SEQ ID NO 294.	XX
OS	Human; chromosome mapping; gene mapping; gene therapy; forensic; food supplement; medical imaging; diagnostic; genetic disorder.	OS	Human; secreted protein; EST; expressed sequence tag; diagnosis; forensic; gene therapy; chromosome mapping; signal peptide; upstream regulatory sequence; cytokine activity; cell proliferation; differentiation; haemato poiesis regulation; tissue growth regulation; reproductive hormone regulation; chemotactic; chemokinetic; haemostatic; thrombolytic; anti-inflammatory; tumour inhibition.	OS	Human; secreted protein; EST; expressed sequence tag; diagnosis; forensic; gene therapy; chromosome mapping; signal peptide; upstream regulatory sequence; cytokine activity; cell proliferation; differentiation; haemato poiesis regulation; tissue growth regulation; reproductive hormone regulation; chemotactic; chemokinetic; haemostatic; thrombolytic; anti-inflammatory; tumour inhibition.	XX
XX	Homo sapiens.	XX	Homo sapiens.	XX	Homo sapiens.	XX
XX	WO200175067-A2.	XX	W0906551-A2.	XX	W0906551-A2.	XX
PD	11-OCT-2001.	PD	11-FEB-1999.	PD	11-FEB-1999.	XX
XX	30-MAR-2001; 2001WO-US08631.	XX	31-JUL-1998; 98WO-1B01235.	XX	31-JUL-1998; 98WO-1B01235.	XX
PR	31-MAR-2000; 2000US-0540217.	PR	01-AUG-1997; 97US-0905133.	PR	01-AUG-1997; 97US-0905133.	XX
PR	23-AUG-2000; 2000US-0649167.	PR	WPI; 2001-639362/73.	PR	WPI; 2001-639362/73.	XX
XX	(HYSE-) HYSEQ INC.	XX	(GEST ) GENSET.	XX	(GEST ) GENSET.	XX
PA	Drmanac RT, Liu C, Tang YT;	PA	Ducleart A, Dumas Milne Edwards J, Lacroix B;	PA	Ducleart A, Dumas Milne Edwards J, Lacroix B;	XX
XX	WPI; 2001-N-PSDB; AAS86588.	XX	WPI; 1999-153781/13.	XX	WPI; 1999-153781/13.	DR
PT	New isolated polynucleotide and encoded polypeptides, useful in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits and to assess biodiversity -	PT	New isolated polynucleotide and encoded polypeptides, useful in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits and to assess biodiversity -	PT	New isolated polynucleotide and encoded polypeptides, useful in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits and to assess biodiversity -	PT

DR N-PSDB; AAX39538.  
 XX PT New nucleic acids encoding human secreted - proteins obtained from  
 PT PT cDNA libraries prepared from substantia nigra, cerebellum, surrenals  
 PT and fetal brain tissue  
 XX PS Claim 34; Page 394; 434pp; English.  
 XX AAX39440 to AAX39597 represent 5' expressed sequence tags (ESTs) for  
 CC human secreted proteins, and encode the proteins given in AAY11374 to  
 CC AAY11531, respectively. The proteins given represent the signal peptide  
 CC and an N-terminal fragment of a secreted protein. The nucleic acid  
 CC sequences can be used for producing secreted human gene products. They  
 CC can also be used to develop products for diagnosis and therapy. The  
 CC proteins obtained may have cytokine activity, cell  
 CC proliferation/differentiation activity, haemopoiesis regulating  
 CC activity, tissue growth regulating activity, reproductive hormone  
 CC regulating activity, chemotactic/ chemokinetic activity, haemostatic and  
 CC thrombolytic activity, receptor/ ligand activity, anti-inflammatory  
 CC activity, tumour inhibition activity or other activities. The products  
 CC can be used in forensic, gene therapy and chromosome mapping procedures.  
 CC The sequences can also be used for obtaining corresponding promoter  
 CC sequences. The nucleic acids encoding the signal peptide can be used for  
 CC directing extracellular secretion of a polypeptide or the insertion of a  
 CC polypeptide into a membrane, or importing a polypeptide into a cell.  
 CC Sequence 89 AA;

Query Match 28.7%; Score 89; DB 20; Length 89;  
 Best Local Similarity 100.0%; Pred. No. 2.9e-79; Mismatches 0; Indels 0; Gaps 0;

Matches 89; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MALRPRPRLCARLPDFLLFLRGCLIGAVNIKSSNRTPVVOFESEVELSCITDSQT 60  
 Db 1 malrprprrlcarlpdfllflrgcligavnikssnrtpvqefesvelscitdsqt 60  
 Qy 61 SDPRIEKKKIQDDEOTTYVFFDNKIQGDLA 89  
 Db 61 sdpriekkkidqeqttvifdnkiqgda 89  
 Qy 299 EGD 301  
 Db 190 egd 192

RESULT 21

ABG27038  
 ID ABG27038 standard; Protein; 267 AA.  
 AC ABG27038;

18-FEB-2002 (first entry)

DE Novel human diagnostic protein #27029.  
 XX  
 KW Human; chromosome mapping; gene mapping; gene therapy; forensic;  
 KW food supplement; medical imaging; diagnostic; genetic disorder.

XX OS Homo sapiens.  
 XX WO200175067-A2.  
 XX PD 11-OCT-2001.  
 XX YX 30-MAR-2001; 2001WO-US08631.  
 XX PR 31-MAR-2000; 2000US-0540217.  
 XX PR 23-AUG-2000; 2000US-0649167.  
 XX PA (HYSE-) HYSEQ INC.

XX PI Drmanac RT, Liu C, Tang YT;

XX DR WPI; 2001-639362/73.  
 XX DR N-PSDB; AAS91225.

PT New isolated polynucleotide and encoded polypeptides, useful in  
 PT diagnostics, forensics, gene mapping, identification of mutations  
 PT responsible for genetic disorders or other traits and to assess  
 PT biodiversity -  
 XX PS Claim 20; SEQ ID No 57397; 103pp; English.  
 XX CC The invention relates to isolated polynucleotide (I) and  
 CC polypeptide (II) sequences. (I) is useful as hybridisation probes,  
 CC polymerase chain reaction (PCR) primers, oligomers, and for chromosome  
 CC and genome mapping, and in recombinant production of (II). The  
 CC polynucleotides are also used in diagnostics as expressed sequence tags  
 CC for identifying expressed genes. (I) is useful in gene therapy techniques  
 CC to restore normal activity of (II) or to treat disease states involving  
 CC (II). (II) is useful for generating antibodies against it, detecting or  
 CC quantitating a polypeptide in tissue, as molecular weight markers and as  
 CC a food supplement. (II) and its binding partners are useful in medical  
 CC imaging of sites expressing (II). (I) and (II) are useful for treating  
 CC disorders involving aberrant protein expression or biological activity.  
 CC The polypeptide and polynucleotide sequences have applications in  
 CC diagnostics, forensics, gene mapping, identification of mutations  
 CC responsible for genetic disorders or other traits to assess biodiversity  
 CC and to produce other types of data or products dependent on DNA and  
 CC amino acid sequences. ABG0010-ABG30377 represent novel human  
 CC diagnostic amino acid sequences for this patent did not appear in the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at [http://wipo.int/pub/published\\_pct-sequences](http://wipo.int/pub/published_pct-sequences).

SQ Sequence 267 AA;

Query Match 20.3%; Score 63; DB 22; Length 267;  
 Best Local Similarity 100.0%; Pred. No. 2.3e-53; Mismatches 0; Indels 0; Gaps 0;

Qy 239 DLNIGGIGGVVLVALVALLTIGGCCWRGGFINNKQDGESYKNECKPDGUNWIRTE 298  
 Db 130 dnliggigggvvlvalvalltigccyyrgyfinnkqdgesyknpgkpdgvnyirtde 189  
 Qy 299 EGD 301  
 Db 190 egd 192

RESULT 22

ABG07157  
 ID ABG07157 standard; Protein; 264 AA.

AC ABG07157;  
 XX DT 13-FEB-2002 (first entry)

DE Novel human diagnostic protein #7148.

XX OS Human; chromosome mapping; gene mapping; gene therapy; forensic;  
 KW food supplement; medical imaging; diagnostic; genetic disorder.

XX PN WO200175067-A2.  
 XX PD 11-OCT-2001.  
 XX YX 30-MAR-2001; 2001WO-US08631.  
 XX PR 31-MAR-2000; 2000US-0540217.  
 XX PR 23-AUG-2000; 2000US-0649167.  
 XX PA (HYSE-) HYSEQ INC.

XX PI Drmanac RT, Liu C, Tang YT;

XX DR WPI; 2001-639362/73.  
 XX DR N-PSDB; AAS91225.

DR = WPI; 2001-639362/73.

DR N-PSDB; AAS71344.

XX New isolated polynucleotide and encoded polypeptides, useful in PT diagnostics, forensics, gene mapping, identification of mutations

PT responsible for genetic disorders or other traits and to assess

PT biodiversity

XX

PS Claim 20; SEQ ID NO 37516; 103pp; English.

XX

CC The invention relates to isolated polynucleotide (I) and  
CC polypeptide (II) sequences. (I) is useful as hybridisation probes,  
CC polymerase chain reaction (PCR) primers, oligomers, and for chromosome  
CC and gene mapping, and in recombinant production of (II). The  
CC polynucleotides are also used in diagnostics as expressed sequence tags  
CC for identifying expressed genes. (I) is useful in gene therapy techniques  
CC to restore normal activity of (II) or to treat disease states involving  
CC (III). (II) is useful for generating antibodies against it, detecting or  
CC quantitating a polypeptide in tissue, as molecular weight markers and as  
CC a food supplement. (II) and its binding partners are useful in medical  
CC imaging of sites expressing (II). (I) and (II) are useful for treating  
CC disorders involving aberrant protein expression or biological activity.  
CC The polypeptide and polynucleotide sequences have applications in  
CC diagnostics, forensics, gene mapping, identification of mutations  
CC responsible for genetic disorders or other traits to assess biodiversity  
CC and to produce other types of data and products dependent on DNA and  
CC amino acid sequences. ABG0010-ABG0377 represent novel human  
CC diagnostic amino acid sequences of the invention.  
CC Note: The sequence data for this patent did not appear in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences.

XX Sequence 264 AA;

SQ

Query Match	16.5%	Score	51	DB	22;	Length	264;
Best Local Similarity	100.0%	Pred. No.	1.3e-41;				
Matches	51;	Conservative	0;	Mismatches	0;	Indels	0;
ID	ABG22399			Gaps	0;		
XX							

Query Match	16.5%	Score	51	DB	22;	Length	264;
Best Local Similarity	100.0%	Pred. No.	1.3e-41;				
Matches	51;	Conservative	0;	Mismatches	0;	Indels	0;
XX	86	gdlagraeilgktskiwnytrrdsalycevvarndrkreideietylvo	136				
QY							
Db	214	gdlagraeilgktskiwnytrrdsalycevvarndrkreideietylvo	264				

RESULT 23

Query Match	16.5%	Score	51	DB	22;	Length	264;
Best Local Similarity	100.0%	Pred. No.	1.3e-41;				
Matches	51;	Conservative	0;	Mismatches	0;	Indels	0;
ID	ABG22399			Gaps	0;		
XX							

ABG22399;

XX 18-FEB-2002 (first entry)

DE Novel human diagnostic protein #22390.

XX Human; chromosome mapping; gene mapping; forensic;  
KW food supplement; medical imaging; diagnostic; genetic disorder;  
XX OS Homo sapiens.

XX PN WO20175067-A2.

XX 11-OCT-2001.

XX PD 30-MAR-2001; 2001WO-US08631.

XX PR 31-MAR-2000; 2000US-0540217.

XX PR 23-AUG-2000; 2000US-0649167.

XX PA (HYSE-) HYSEQ INC.

XX PI Drmanac RT, Liu C, Tang YT;

XX DR WPI; 2001-639362/73.

DR N-PSDB; AAS86586.

XX New isolated polynucleotide and encoded polypeptides, useful in PT diagnostics, forensics, gene mapping, identification of mutations

PT responsible for genetic disorders or other traits and to assess

PT biodiversity

XX

PS Claim 20; SEQ ID NO 52758; 103pp; English.

XX

CC The invention relates to isolated polynucleotide (I) and  
CC polypeptide (II) sequences. (I) is useful as hybridisation probes,  
CC polymerase chain reaction (PCR) primers, oligomers, and for chromosome  
CC and gene mapping, and in recombinant production of (II). The  
CC polynucleotides are also used in diagnostics as expressed sequence tags  
CC for identifying expressed genes. (I) is useful in gene therapy techniques  
CC to restore normal activity of (II) or to treat disease states involving  
CC (II). (II) is useful for generating antibodies against it, detecting or  
CC quantitating a polypeptide in tissue, as molecular weight markers and as  
CC a food supplement. (II) and its binding partners are useful in medical  
CC imaging of sites expressing (II). (I) and (II) are useful for treating  
CC disorders involving aberrant protein expression or biological activity.  
CC The polypeptide and polynucleotide sequences have applications in  
CC diagnostics, forensics, gene mapping, identification of mutations  
CC responsible for genetic disorders or other traits to assess biodiversity  
CC and to produce other types of data and products dependent on DNA and  
CC amino acid sequences. ABG0010-ABG0377 represent novel human  
CC diagnostic amino acid sequences of the invention.  
CC Note: The sequence data for this patent did not appear in the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/published\_pct\_sequences.

XX Sequence 301 AA;

SQ

Query Match	16.5%	Score	51	DB	22;	Length	301;
Best Local Similarity	100.0%	Pred. No.	1.5e-41;				
Matches	51;	Conservative	0;	Mismatches	0;	Indels	0;
ID	ABG22398			Gaps	0;		
XX							

Query Match	16.5%	Score	51	DB	22;	Length	301;
Best Local Similarity	100.0%	Pred. No.	1.5e-41;				
Matches	51;	Conservative	0;	Mismatches	0;	Indels	0;
ID	ABG22398			Gaps	0;		
XX	86	gdlagraeilgktskiwnytrrdsalycevvarndrkreideietylvo	136				
QY							
Db	214	gdlagraeilgktskiwnytrrdsalycevvarndrkreideietylvo	264				

RESULT 24

Query Match	16.5%	Score	51	DB	22;	Length	301;
Best Local Similarity	100.0%	Pred. No.	1.5e-41;				
Matches	51;	Conservative	0;	Mismatches	0;	Indels	0;
ID	ABG22398			Gaps	0;		
XX							

ABG22398;

XX 18-FEB-2002 (first entry)

DE Novel human diagnostic protein #22389.

XX Human; chromosome mapping; gene mapping; forensic;  
KW food supplement; medical imaging; diagnostic; genetic disorder;  
XX OS Homo sapiens.

XX PN WO20175067-A2.

XX 11-OCT-2001.

XX PD 30-MAR-2001; 2001WO-US08631.

XX PR 31-MAR-2000; 2000US-0540217.

XX PR 23-AUG-2000; 2000US-0649167.

XX PA (HYSE-) HYSEQ INC.

XX PI Drmanac RT, Liu C, Tang YT;

XX DR WPI; 2001-639362/73.





XX 23-JAN-2002 (first entry)  
 XX DE Protein #1768 encoded by probe for measuring heart cell gene expression.  
 XX KW .Human; gene expression; heart; microarray; vascular system;  
 KW cardiovascular disease; hypertension; cardiac arrhythmia;  
 KW congenital heart disease.  
 XX OS Homo sapiens.  
 XX PN WO200157274-A2.  
 XX PD 09-AUG-2001.  
 XX PF 09-AUG-2001.  
 XX PR 04-FEB-2001; 2001WO-US00666.  
 XX PR 04-FEB-2000; 2000US-0180312.  
 XX PR 26-MAY-2000; 2000US-0207456.  
 XX PR 30-JUN-2000; 2000US-0608408.  
 XX PR 03-AUG-2000; 2000US-0652366.  
 XX PR 21-SEP-2000; 2000US-0234687.  
 XX PR 27-SEP-2000; 2000US-0236359.  
 XX PR 04-OCT-2000; 2000GB-0024263.  
 XX PA (MOLE-) MOLECULAR DYNAMICS INC.  
 XX PI Penn SG, Hanzel DK, Chen W, Rank DR;  
 XX DR WPI; 2001-488899/53.  
 XX PT Single exon nucleic acid probes for analyzing gene expression in human  
 PT hearts .  
 XX PS Claim 15; SEQ ID No 21539; 530pp; English.  
 CC The present invention relates to single exon nucleic acid probes for  
 CC measuring human gene expression in a sample derived from human heart (see  
 CC AB21535-ABAA1305). The present sequence is a protein encoded by one such  
 CC probe. The probes may be used for predicting, measuring and displaying  
 gene expression in samples derived from the human heart via microarrays.  
 CC By measuring gene expression, the probes are useful for predicting,  
 CC diagnosing, grading, staging, monitoring and prognosis diseases of the  
 CC human heart and vascular system e.g. cardiovascular disease,  
 CC hypertension, cardiac arrhythmias and congenital heart disease.  
 CC Note: The sequence data for this patent did not form part of the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp://wipo.int/pub/published\_pct\_sequences.  
 SQ Sequence 31 AA;  
 Query Match 2.6%; Score 8; DB 22; Length 31;  
 Best Local Similarity 100.0%; Pred. No. 3.1;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 249 VIVVLAVL 256  
 Db 10 vivvlavl 17  
 RESULT 31  
 DT AAM67540 standard; Protein: 31 AA.  
 ID AAM67540  
 XX AC AAM67540;  
 XX DT 06-NOV-2001 (first entry)  
 XX DE Human bone marrow expressed probe encoded protein SEQ ID NO: 27846.  
 XX KW Human; bone marrow expressed exon; gene expression analysis; probe;  
 KW microarray; cancer; leukaemia; lymphoma; myeloma.  
 XX OS Homo sapiens.  
 XX PN WO200157276-A2.  
 XX PD 09-AUG-2001.  
 XX PF 30-JAN-2001; 2001WO-US00668.  
 XX PR 04-FEB-2000; 2000US-0180312.  
 PR 26-MAY-2000; 2000US-0207456.  
 PR 30-JUN-2000; 2000US-0608408.  
 KW epilepsy; cancer.  
 KW OS Homo sapiens.  
 KW XX PN WO200157275-A2.  
 KW PD 09-AUG-2001.  
 KW PF 30-JAN-2001; 2001WO-US00667.  
 KW XX PR 04-FEB-2000; 2000US-0180312.  
 KW PR 26-MAY-2000; 2000US-0207456.  
 KW PR 30-JUN-2000; 2000US-0508408.  
 KW PR 03-AUG-2000; 2000US-0652366.  
 KW PR 21-SEP-2000; 2000US-0234687.  
 KW PR 27-SEP-2000; 2000US-0236359.  
 KW PR 04-OCT-2000; 2000GB-0024263.  
 KW PA (MOLE-) MOLECULAR DYNAMICS INC.  
 KW PI Penn SG, Hanzel DK, Chen W, Rank DR;  
 KW DR WPI; 2001-483446/52.  
 KW XX PT Single exon nucleic acid probes for analyzing gene expression in human  
 KW PT brains .  
 KW PS Example 4; SEQ ID NO: 27252; 650pp + Sequence Listing; English.  
 KW CC The present invention provides a number of single exon nucleic acid  
 KW probes which are derived from genomic sequences expressed in the human  
 KW brain. They can be used to measure gene expression in brain cell samples,  
 KW which may enable the diagnosis and improved treatment of nervous system  
 KW diseases such as Alzheimer's disease, multiple sclerosis, schizophrenia,  
 KW epilepsy and cancers. The present sequence is a protein encoded by one of  
 KW the probes of the invention.  
 SQ Sequence 31 AA;  
 Query Match 2.6%; Score 8; DB 22; Length 31;  
 Best Local Similarity 100.0%; Pred. No. 3.1;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 249 VIVVLAVL 256  
 Db 10 vivvlavl 17

ON protein - protein search, using sw model

Run on: September 19, 2002, 17:39:38 ; Search time 23.64 Seconds

Sequence: (without alignments) 320.302 Million cell updates/sec

Title: US-09-524-531C-15

Perfect .score: 310

Sequence: 1 MALLRPPPLRLCARLPDFFL . . . . . VNVVIRTDEEGDFRRHKSSFVVI 310

Scoring table: OLIGO Gapop 60.0 , Gapext 60.0

Searched: 231628 seqs, 24425594 residues

Total number of hits satisfying chosen parameters: 231628

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Listing first 75 summaries

Database : Issued\_Patents\_AA:\*

1: /cgn2\_6/ptodata/2/iaa5A\_COMB\_pep:\*

2: /cgn2\_6/ptodata/2/iaa5B\_COMB\_pep:\*

3: /cgn2\_6/ptodata/2/iaa6A\_COMB\_pep:\*

4: /cgn2\_6/ptodata/2/iaa6B\_COMB\_pep:\*

5: /cgn2\_6/ptodata/2/iaa6C\_PCTUS\_COMB\_pep:\*

6: /cgn2\_6/ptodata/2/iaa6backfile1.pep:\*

Pred. No. 15 is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match Length	DB ID	Description
1	7	2.3	14 2	US-08-310-912A-190 Sequence 190, App
2	7	2.3	14 4	US-09-301-085-190 Sequence 190, App
3	7	2.3	14 5	PCT-US95-04589-190 Sequence 190, App
4	7	2.3	52 4	US-09-330-330-9 Sequence 190, App
5	7	2.3	52 1	US-08-84-272-2 Sequence 190, App
6	7	2.3	241 1	US-08-76-489-2 Sequence 190, App
7	7	2.3	241 1	US-08-467-070-2 Sequence 190, App
8	7	2.3	241 1	US-08-67-070A-2 Sequence 190, App
9	7	2.3	241 5	PCT-US93-11669-2 Sequence 190, App
10	7	2.3	244 4	US-08-883-086-9 Sequence 190, App
11	7	2.3	249 2	US-09-154-801-1 Sequence 190, App
12	7	2.3	249 3	US-09-973-029-1 Sequence 190, App
13	7	2.3	333 1	US-08-148-215A-4 Sequence 190, App
14	7	2.3	454 4	US-09-240-631-11 Sequence 190, App
15	7	2.3	524 2	US-08-928-692-12 Sequence 190, App
16	7	2.3	642 1	US-08-706-936-2 Sequence 190, App
17	7	2.3	642 1	US-08-066-936-3 Sequence 190, App
18	7	2.3	643 2	US-08-616-844-39 Sequence 190, App
19	7	2.3	643 2	US-08-599-654-39 Sequence 190, App
20	7	2.3	643 3	US-08-444-868A-39 Sequence 190, App
21	7	2.3	643 3	US-08-944-423A-39 Sequence 190, App
22	7	2.3	693 1	US-08-944-496-39 Sequence 190, App
23	7	2.3	693 2	US-08-553-275-2 Sequence 190, App
24	7	2.3	885 2	US-08-310-912A-2 Sequence 190, App
25	7	2.3	885 3	US-08-841-089-2 Sequence 190, App
26	7	2.3	885 4	US-09-301-083-2 Sequence 190, App
27	7	2.3	885 5	PCT-US95-04570-2 Sequence 190, App

## ALIGMENTS

GENERAL INFORMATION:

APPLICANT: Ausubel, Frederick M.

APPLICANT: Stackiwicz, Brian J.

APPLICANT: Brent, Andrew F.

APPLICANT: Dahlbeck, Douglas

APPLICANT: Katgiri, Rumiaki

APPLICANT: Kunkel, Barbara N.

APPLICANT: Mindrinos, Michael N.

APPLICANT: Yu, Guo-Liang

TITLE OF INVENTION: RPS2 GENE FAMILY, PRIMERS, PROBES, AND DETECTION METHODS

NUMBER OF SEQUENCES: 208

CORRESPONDENCE ADDRESS:

ADDRESSEE: Fish & Richardson P.C.

STREET: 225 Franklin Street

CITY: Boston



GenCore version 4.5  
Copyright (c) 1993 - 2000 Compugen Ltd.

## OM protein - protein search, using SW model

Run on: September 19, 2002, 17:32:32 ; Search time 52.83 Seconds

651.767 Million cell updates/sec

Title: US-09-524-531C-13  
Perfect score: 310  
Sequence: I MAISRRRLRLYARLPHFFL..... VNYIRTSEBGDFRHKSFVI 310  
Scoring table: OLIGO  
Gapop 60.0 , Gapext 60.0

Searched: 747574 seqs, 111073796 residues

Minimum DB seq length: 0  
Maximum DB seq length: 200000000  
Total number of hits satisfying chosen parameters: 747574

## Post-processing: Listing first 75 summaries

Database : A\_GeneSeq\_032802:\*

1: /SIDS1/gcadata/hold-geneseq/geneseqp-emb1/AA1980.DAT:\*

2: /SIDS1/gcadata/hold-geneseq/geneseqp-emb1/AA1981.DAT:\*

3: /SIDS1/gcadata/hold-geneseq/geneseqp-emb1/AA1982.DAT:\*

4: /SIDS1/gcadata/hold-geneseq/geneseqp-emb1/AA1983.DAT:\*

5: /SIDS1/gcadata/hold-geneseq/geneseqp-emb1/AA1984.DAT:\*

6: /SIDS1/gcadata/hold-geneseq/geneseqp-emb1/AA1985.DAT:\*

7: /SIDS1/gcadata/hold-geneseq/geneseqp-emb1/AA1986.DAT:\*

8: /SIDS1/gcadata/hold-geneseq/geneseqp-emb1/AA1987.DAT:\*

9: /SIDS1/gcadata/hold-geneseq/geneseqp-emb1/AA1988.DAT:\*

10: /SIDS1/gcadata/hold-geneseq/geneseqp-emb1/AA1989.DAT:\*

11: /SIDS1/gcadata/hold-geneseq/geneseqp-emb1/AA1990.DAT:\*

12: /SIDS1/gcadata/hold-geneseq/geneseqp-emb1/AA1991.DAT:\*

13: /SIDS1/gcadata/hold-geneseq/geneseqp-emb1/AA1992.DAT:\*

14: /SIDS1/gcadata/hold-geneseq/geneseqp-emb1/AA1993.DAT:\*

15: /SIDS1/gcadata/hold-geneseq/geneseqp-emb1/AA1994.DAT:\*

16: /SIDS1/gcadata/hold-geneseq/geneseqp-emb1/AA1995.DAT:\*

17: /SIDS1/gcadata/hold-geneseq/geneseqp-emb1/AA1996.DAT:\*

18: /SIDS1/gcadata/hold-geneseq/geneseqp-emb1/AA1997.DAT:\*

19: /SIDS1/gcadata/hold-geneseq/geneseqp-emb1/AA1998.DAT:\*

20: /SIDS1/gcadata/hold-geneseq/geneseqp-emb1/AA2000.DAT:\*

21: /SIDS1/gcadata/hold-geneseq/geneseqp-emb1/AA2001.DAT:\*

22: /SIDS1/gcadata/hold-geneseq/geneseqp-emb1/AA2001.DAT:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query	Match Length	DB ID	Description
1	310	100.0	310	21	AAB27272 Human confluency r
2	310	100.0	310	21	AAB27278 Murine confluency
3	24	7.7	285	21	AAB39254 Human secreted pro
4	24	7.7	291	22	AEG04645 Novel human diagno
5	24	7.7	310	21	AAB27276 Human confluency r
6	24	7.7	310	21	AAB34657 Human PRO1868 prot
7	24	7.7	310	21	PRO1866, an A33 an
8	24	7.7	310	21	Human IGFAM-6 immu
9	24	7.7	310	21	Human polypeptide,
10	24	7.7	310	22	Human polypeptide,
11	24	7.7	310	22	Human PRO1868 poly

## ALIGNMENTS

RESULT 1	1	12	24	7.7	310	22	AAB80272 Human PRO868 prot
		13	24	7.7	310	22	AAB80383 Secreted protein e
		14	24	7.7	310	22	AAB80409 Secreted protein e
		15	24	7.7	310	22	AAB80409 Secreted protein e
		16	24	7.7	311	21	AAB38333 Human secreted pro
		17	24	7.7	311	21	AAB38333 Human secreted pro
		18	24	7.7	311	21	AAB38344 Human secreted pro
		19	24	7.7	339	22	AAB80431 Gene #13 associate
		20	24	7.7	404	22	AAB12109 Novel human diagno
		21	24	6.8	361	22	AAB22401 Novel human diagno
		22	24	4.8	68	22	AEG22398 Novel human diagno
		23	15	4.8	89	20	AAY11472 Human 5' EST secre
		24	10	3.2	267	22	ABG27038 Novel human diagno
		25	8	2.6	48	17	AAN01191 Serine protease Pr
		26	8	2.6	48	22	AAB50588 Corynebacterium gl
		27	8	2.6	324	22	AAB79609 S. epidermidis ope
		28	8	2.6	336	22	AUT00245 S. epidermidis ope
		29	8	2.6	506	21	AEG22062, Propionibacterium
		30	31	2.6	246	22	AAB50615 Flea serine prote
		31	8	2.6	324	22	AEG93112 C glutamicum pro
		32	8	2.6	324	22	AAB79609 Flea serine prote
		33	8	2.6	336	22	AUT00245 Corynebacterium gl
		34	8	2.6	56	22	AEG04488 L. maculans resist
		35	7	2.3	7	21	AAB27269 Arabidopsis thalia
		36	7	2.3	39	21	AAB7270 Murine CRAM-1 tyro
		37	7	2.3	40	21	AAB43780 Murine CRAM-1 tyro
		38	7	2.3	56	22	AEG04488 Human secreted pro
		39	7	2.3	58	22	AAU49383 Human colon cancer
		40	7	2.3	67	21	AEG34555 Propionibacterium
		41	7	2.3	7	21	AEG34554 Propionibacterium
		42	7	2.3	70	21	AEG34554 Propionibacterium
		43	7	2.3	71	22	AQ011264 Human Polypeptide
		44	7	2.3	85	20	AEG12629 Human Polypeptide
		45	7	2.3	91	22	AAG74654 Human colon cancer
		46	7	2.3	92	21	AAG59054 Arabidopsis thalia
		47	7	2.3	92	21	AAG65034 Arabidopsis thalia
		48	7	2.3	93	22	AAG34555 Arabidopsis thalia
		49	7	2.3	101	22	AAG62010 Arabidopsis thalia
		50	7	2.3	104	22	AQ009976 Arabidopsis thalia
		51	7	2.3	110	21	AAG59053 Arabidopsis thalia
		52	7	2.3	110	21	AAG60334 Arabidopsis thalia
		53	7	2.3	111	22	AUO39287 Arabidopsis thalia
		54	7	2.3	115	22	AEG12822 Arabidopsis thalia
		55	7	2.3	121	21	AAB07722 Arabidopsis thalia
		56	7	2.3	127	22	AEG04070 Arabidopsis thalia
		57	7	2.3	145	21	AAY87479 Arabidopsis thalia
		58	7	2.3	147	21	AEG6119 Arabidopsis thalia
		59	7	2.3	147	22	ABP10048 Arabidopsis thalia
		60	7	2.3	158	21	AAG03639 Arabidopsis thalia
		61	7	2.3	170	21	AAY78114 Arabidopsis thalia
		62	7	2.3	170	22	AAB67667 Arabidopsis thalia
		63	7	2.3	173	22	AEG12245 Arabidopsis thalia
		64	7	2.3	179	21	AAG06039 Arabidopsis thalia
		65	7	2.3	180	22	AAG81557 Arabidopsis thalia
		66	7	2.3	185	22	ABR52473 Escherichia coli P
		67	7	2.3	201	22	ABG3773 Human colon cancer
		68	7	2.3	208	21	AAG96294 Arabidopsis thalia
		69	7	2.3	209	22	AAM23936 Human CKSR-2 homolog
		70	7	2.3	209	22	AAM23951 Arabidopsis thalia
		71	7	2.3	233	20	AAY27767 S. epidermidis ope
		72	7	2.3	242	22	ABR30277 Escherichia coli P
		73	7	2.3	242	22	ABR3543 Human secreted pro
		74	7	2.3	242	22	ABR20882 Protein #281 enco
		75	7	2.3	242	22	ABM5266 Human brain express

AC	AAB27272;	ID	AAB27278 standard; Protein; 310 AA.
XX		XX	
DT	23-FEB-2001 (first entry)	AC	AAB27278;
XX		XX	
DE	Human confluence regulated adhesion molecule 1 #1.	DT	23-FEB-2001 (first entry)
XX		XX	
KW	Immunoglobulin superfamily; Ig Sf; vascular adhesion molecule;	DE	Murine confluence regulated adhesion molecule 1.
KW	inflammation; cancer; wound; angiogenesis; human;	KW	Immunoglobulin superfamily; Ig Sf; vascular adhesion molecule;
KW	confluence regulated adhesion molecule 1; CRAM-1; JAM-2.	KW	inflammation; cancer; wound; angiogenesis; mouse;
OS	Homo sapiens.	KW	confluence regulated adhesion molecule 1; CRAM-1; JAM-2.
XX		XX	
PN	WO20053749-A2.	OS	Mus sp.
XX		XX	
PD	14-SEP-2000.	PN	WO20053749-A2.
XX		XX	
PF	13-MAR-2000; 2000WO-EP02219.	PD	14-SEP-2000.
XX		XX	
PR	11-MAR-1999; 99EP-0200746.	PF	13-MAR-2000; 2000WO-EP02219.
(RMD-) RMF DICTAGENE SA.		XX	
XX		PR	11-MAR-1999; 99EP-0200746.
PI	Imhof BA, Aurrand-Lions M;	XX	(RMD-) RMF DICTAGENE SA.
XX		XX	
DR	WPI; 2000-587436/55.	PI	Imhof BA, Aurrand-Lions M;
XX		XX	
PT	Isolated human Confluence Regulated Adhesion Molecule 1 or 2 (CRAM-1 or	DR	WPI; 2000-587436/55.
PT	CRAM-2) polypeptide, useful for treatment of tumors, inflammation	DR	N-PSDB; AAA97189.
PT	reactions and modulating vascular permeability -	XX	
XX		PT	Isolated human Confluence Regulated Adhesion Molecule 1 or 2 (CRAM-1 or
PS	CRAM-2) polypeptide, useful for treatment of tumors, inflammation	XX	CRAM-2) polypeptide, useful for treatment of tumors, inflammation
CC	The present sequence is the human confluence regulated adhesion molecule	PS	reactions and modulating vascular permeability -
CC	1 (CRAM-1, also known as JAM-2). CRAM-1 is one of the vascular adhesion	Example; Fig 8; 59pp; English.	
CC	proteins of the immunoglobulin superfamily (Ig Sf). The CRAM-1 protein	XX	
CC	and coding sequence can be used in the treatment of cancer, inflammation,	CC	The present sequence is the murine confluence regulated adhesion molecule
CC	inflammation, to modulate cell-cell interactions and angiogenesis, and	CC	1 (CRAM-1, also known as JAM-2). CRAM-1 is one of the vascular adhesion
CC	in the modulation of wound healing.	CC	proteins of the immunoglobulin superfamily (Ig Sf). The CRAM-1 protein
SQ	Sequence 310 AA;	CC	and coding sequence can be used in the treatment of cancer, inflammation,
Query Match	100.0%; Score 310; DB 21; Length 310;	CC	to modulate cell-cell interactions and angiogenesis, and in the
Best Local Similarity	100.0%; Pred. No. 1, 3e-288; Indels 0; Gaps 0;	CC	modulation of wound healing.
Matches	310; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	XX	
Qy	1 MAISRLRLRLYARLPHFFLLFRGCMTEAVNLKSSNRNPVHESVELSCITHSQ 60	Query Match	100.0%; Score 310; DB 21; Length 310;
1		Best Local Similarity	100.0%; Pred. No. 1, 3e-288; Indels 0; Gaps 0;
1	maisrlrlrllyarlpffllfrgcmeavnlkssnrnpvhesevelscithsq 60	Matches	310; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy	61 SDPRIEWEKKIQDQTTYYFDNKIQGDLAGRTYFGKSLRINWNTSDSAIRCEVAL 120	Qy	1 MAISRLRLRLYARLPHFFLLFRGCMTEAVNLKSSNRNPVHESVELSCITHSQ 60
61		Db	1 maisrlrlrllyarlpffllfrgcmeavnlkssnrnpvhesevelscithsq 60
Db	sdPRIEWKIQDQTTYYFDNKIQGDLAGRTYFGKSLRINWNTSDSAIRCEVAL 120	Qy	61 SDPRIEWEKKIQDQTTYYFDNKIQGDLAGRTYFGKSLRINWNTSDSAIRCEVAL 120
Qy	121 NDREKEDETIELJQWVPPTPVCRIAPAVPKTATOCQEQSEGYPRPHYSWRNDPL 180	Db	61 sdPRIEWKIQDQTTYYFDNKIQGDLAGRTYFGKSLRINWNTSDSAIRCEVAL 120
121		Db	ndrkeweideitieljqvqkvptpcrpriapavpkktatlcqesegyprphyswrndpl 180
Db	ndrkeweideitieljqvqkvptpcrpriapavpkktatlcqesegyprphyswrndpl 180	Qy	121 NDREKEDETIELJQWVPPTPVCRIAPAVPKTATOCQEQSEGYPRPHYSWRNDPL 180
Qy	181 PTDSRANPFRQNSPHVNSETGTIVFNAVKDDSGQYCCIASNDAGAARCEGODMEVDL 240	Db	61 sdPRIEWKIQDQTTYYFDNKIQGDLAGRTYFGKSLRINWNTSDSAIRCEVAL 120
181		Db	121 ndrkeweideitieljqvqkvptpcrpriapavpkktatlcqesegyprphyswrndpl 180
Db	ptdsranpfrqnsphvnsetgtivfnawhkddsgqycciasndagaarcegdmeydl 240	Qy	181 PTDSRANPFRQNSPHVNSETGTIVFNAVKDDSGQYCCIASNDAGAARCEGODMEVDL 240
Qy	241 NIAGIGGGYLVLVILVAVITMGGTCAYRGCFISSKQDGESYSPKGKDGVNIRTSEG 300	Db	121 ndrkeweideitieljqvqkvptpcrpriapavpkktatlcqesegyprphyswrndpl 180
241		Qy	241 NIAGIGGGYLVLVILVAVITMGGTCAYRGCFISSKQDGESYSPKGKDGVNIRTSEG 300
Db	niagiiggylvilvavitmgingccayrgcfisskqdgesykspgkhgnyirtseg 300	Db	181 ptdsranpfrqnsphvnsetgtivfnawhkddsgqycciasndagaarcegdmeydl 240
Qy	301 DFHKSSFV 310	Qy	241 niagiiggylvilvavitmgingccayrgcfisskqdgesykspgkhgnyirtseg 300
301		Qy	301 DFHKSSFV 310
Db	dfrhkssfv 310	Db	301 dfrhkssfv 310
RESULT	2	AA927278	

RESULT 3  
 AAB39254  
 ID AAB39254 standard; Protein: 285 AA.  
 XX  
 AC AAB39254;  
 XX  
 DT 02-FEB-2001 (first entry)  
 DE Human secreted protein sequence encoded by gene 15 SEQ ID NO:134.  
 XX  
 KW Human; secreted protein; immunosuppressive; antiarthritic; antirheumatic;  
 antiproliferative; cytostatic; cardiant; vasotrophic; cerebroprotective;  
 nootropic; neuroprotective; antibacterial; viricide; fungicide; neoplasm;  
 ophthalmological; autoimmune disease; rheumatoid arthritis; angiogenesis;  
 hyperproliferative disorder; cardiovascular disorder; infection;  
 cerebrovascular disorder; nervous system disorder; ocular disorder;  
 wound healing; chemotaxis.  
 XX  
 OS Homo sapiens.  
 WO2000056754-A1.  
 XX  
 PD 28-SEP-2000.  
 XX  
 PF 16-MAR-2000; 2000WO-US06792.  
 XX  
 PR 19-MAR-1999; 99US-0125362.  
 PR 10-DEC-1999; 99US-0169980.  
 XX  
 PA (HUMA-) HUMAN GENOME SCI INC.  
 XX  
 PI Rosen GA, Ruben SM, Komatsoulis G;  
 DR WPI; 2000-579483-54.  
 DR N-PSDB; AAC74237.  
 XX  
 PT Isolated nucleic acid molecule encoding a human secreted protein is  
 used in preventing, treating or ameliorating a medical condition -  
 XX  
 Disclosure; Page 32; 434pp; English.  
 XX  
 CC The polynucleotide sequences given in AAC74223-C74279 encode the human  
 secreted proteins represented in AAB39179-B39226. Sequences  
 AAB39227-B39308 are alternative proteins encoded by the genes, and also  
 CC protein sequences with which they share homology. The proteins have  
 CC activities based on the tissues and cells in which they are expressed.  
 CC Examples of activities include: immunosuppressive; antiarthritic;  
 antirheumatic; antiproliferative; cytostatic; cardiant; vasotrophic;  
 cerebroprotective; nootropic; neuroprotective; antibacterial; viricide;  
 fungicide; and ophthalmological. The human secreted proteins,  
 CC polynucleotides, antagonists and agonists of the invention may be useful  
 in the treatment, prevention, and/or diagnosis of various disease  
 disorders and conditions such as autoimmune diseases e.g. rheumatoid  
 CC arthritis, hyperproliferative disorders e.g. neoplasms of the breast or  
 liver, cardiovascular disorders e.g. cardiac arrest, cerebrovascular  
 CC disorders e.g. cerebral ischaemia, angiogenesis, nervous system disorders  
 e.g. Alzheimer's disease, infections caused by bacteria, viruses and  
 CC fungi and ocular disorders e.g. corneal infection. The polypeptides can  
 also be used to aid wound healing and epithelial cell proliferation, to  
 CC regenerate tissues, maintain organs before transplantation, in  
 CC chemotaxis and as a food additive or preservative e.g. to increase  
 CC storage capabilities. Sequences AAC74214-C74222 and AAB39178 are used  
 during the isolation and characterisation of the genes of the invention.  
 XX  
 Sequence 285 AA;

Db 142 prphyswvndvpltdsranprf 165  
 RESULT 4  
 ID ABG04645 standard; Protein: 291 AA.  
 XX  
 AC ABG04645;  
 XX  
 DT 13-FEB-2002 (first entry)  
 DE Novel human diagnostic protein #4636.  
 XX  
 KW Human; chromosome mapping; gene mapping; gene therapy; forensic;  
 food supplement; medical imaging; diagnostic; genetic disorder.  
 XX  
 OS Homo sapiens.  
 WO200175067-A2.  
 XX  
 PD 11-OCT-2001.  
 XX  
 PF 30-MAR-2001; 2001WO-US08631.  
 XX  
 PR 31-MAR-2000; 2000US-0540217.  
 PR 23-AUG-2000; 2000US-0649167.  
 XX  
 PA (HYSE-) HYSEQ INC.  
 XX  
 PI Dumanac RT, Liu C, Tang YT;  
 DR WPI; 2001-639362/73.  
 DR N-PSDB; AA568832.  
 XX  
 PT New isolated polynucleotide and encoded polypeptides, useful in  
 PT diagnostics, forensics, gene mapping, identification of mutations  
 PT responsible for genetic disorders or other traits and to assess  
 PT biodiversity.  
 XX  
 PS Claim 20; SEQ ID No 35004; 103pp; English.  
 XX  
 CC The invention relates to isolated polynucleotide (I) and  
 CC polypeptide (II) sequences. (I) is useful as hybridisation probes,  
 CC polymerase chain reaction (PCR) primers, oligomers, and for chromosome  
 CC and gene mapping and in recombinant production of (II). The  
 CC polynucleotides are also used in diagnostics as expressed sequence tags  
 CC for identifying expressed genes. (I) is useful in gene therapy techniques  
 CC to restore normal activity of (II) or to treat disease states involving  
 CC (II). (II) is useful for generating antibodies against it, detecting or  
 quantitating a polypeptide in tissue, as molecular weight markers and as  
 CC a food supplement. (II) and its binding partners are useful in medical  
 CC imaging of sites expressing (II). (I) and (II) are useful for treating  
 CC disorders involving aberrant protein expression or biological activity.  
 CC The polypeptide and polynucleotide sequences have applications in  
 CC diagnostics, forensics, gene mapping, identification of mutations  
 CC responsible for genetic disorders or other traits to assess biodiversity  
 CC and to produce other types of data and products dependent on DNA and  
 CC amino acid sequences. ABG0010-ABG0377 represent novel human  
 CC diagnostic amino acid sequences of the invention.  
 CC Note: The sequence data for this patent did not appear in the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/published\_pct\_sequences.  
 XX  
 SQ Sequence 291 AA;

Query Match 7.7%; Score 24; DB 21; Length 285;  
 Best Local Similarity 100.0%; Pred. No. 1.1e-14;  
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 167 PRPHYSWVNDVPLTDSSRANPRF 190

Db 214 prphyswyrndvpvlptdsranprf 237  
 KW antiasthmatic; systemic lupus erythematosus; rheumatoid arthritis;  
 KW osteoarthritis; spondyloarthropathy; systemic sclerosis; sarcoidosis;  
 RESULT 5 idiopathic inflammatory myopathy; Sjogren's syndrome; thyroiditis;  
 AAB27276 standard; Protein; 310 AA.  
 ID AAB27276  
 KW systemic vasculitis; autoimmune haemolytic anaemia; diabetes mellitus;  
 KW autoimmune thrombocytopenia; immune-mediated renal disease;  
 KW inflammatory bowel disease; gluten-sensitive enteropathy;  
 AC AAB27276;  
 KW autoimmune disease; immune-mediated skin disease; allergic disease;  
 XX 23-FEB-2001 (first entry)  
 DT XX  
 DE Human confluence regulated adhesion molecule 1 #2.  
 KW Immunoglobulin superfamily; Ig Sf; vascular adhesion molecule;  
 KW inflammation; cancer; wound; angiogenesis; human;  
 KW confluence regulated adhesion molecule 1; CRAM-1; JAM-2.  
 OS Homo sapiens.  
 XX WO200053749-A2.  
 PN XX  
 PD XX  
 14-SEP-2000.  
 XX 13-MAR-2000; 2000WO-EP02219.  
 PF XX  
 PR 11-MAR-1999; 99EP-0200746.  
 PA (RMFD-) RMF DICTAGENE SA.  
 PT Imhof BA, Aurrand-Lions M;  
 DR WPI; 2000-587436/35.  
 DR N-PSDB; AAA95306.  
 PT Isolated human Confluence Regulated Adhesion Molecule 1 or 2 (CRAM-1 or  
 PT CRAM-2) polypeptide, useful for treatment of tumors, inflammation  
 reactions and modulating vascular permeability  
 PT XX  
 PS Claim 2; Fig 6; 5pp; English.  
 XX The present sequence is the human confluence regulated adhesion molecule  
 CC 1 (CRAM-1, also known as JAM-2). CRAM-1 is one of the vascular adhesion  
 CC proteins of the immunoglobulin superfamily (Ig Sf). The CRAM-1 protein  
 CC and coding sequence can be used in the treatment of cancer, inflammation,  
 CC to modulate cell-cell interactions and angiogenesis, and in the  
 CC modulation of wound healing.  
 XX Sequence 310 AA;

Query Match 7.7%; Score 24; DB 21; Length 310;  
 Best local Similarity 100.0%; Pred. No. 1.2e-14; Mismatches 0; Indels 0; Gaps 0;  
 Matches 24; Conservative 0; N mismatches 0.

QY 167 PRHYSWYRNDVPLPTDSRANPRF 190  
 Db 167 prphyswyrndvpvlptdsranprf 190  
 PR 22-FEB-2000; 2000WO-US04342.  
 PR 18-FEB-2000; 2000WO-US04341.  
 PR 18-FEB-2000; 2000WO-US04340.  
 PR 22-FEB-2000; 2000WO-US04414.  
 XX  
 RESULT 6  
 AAB33457  
 ID AAB33457 standard; Protein; 310 AA.  
 XX  
 AC AAB33457;  
 XX  
 DT 29-JAN-2001 (first entry)  
 XX  
 DE Human Pro1868 protein UNQ859 SEQ ID NO:193.  
 XX  
 KW Human; immune related disease; diagnosis; antiinflammatory; cardiant;  
 KW dermatological; antiarthritic; antiheumatic; immunosuppressive;  
 KW haemostatic; antidiabetic; nootropic; neuroprotective;  
 KW antianæmic; hepatotropic; virucide; antiporriatic; antiallergic;

---

KW antiallergic; systemic lupus erythematosus; rheumatoid arthritis;  
 KW osteoarthritis; spondyloarthropathy; systemic sclerosis; sarcoidosis;  
 KW idiosyncratic inflammatory myopathy; Sjogren's syndrome; thyroiditis;  
 KW systemic vasculitis; autoimmune haemolytic anaemia; diabetes mellitus;  
 KW autoimmune thrombocytopenia; immune-mediated renal disease;  
 KW inflammatory bowel disease; gluten-sensitive enteropathy;  
 KW autoimmune disease; immune-mediated skin disease; allergic disease;  
 KW graft rejection; graft-versus-host-disease.

OS Homo sapiens.  
 XX WO200053758-A2.  
 PN XX  
 PD XX  
 14-SEP-2000.  
 XX PF 02-MAR-2000; 2000WO-US05841.  
 PR XX  
 PR 08-MAR-1999; 99WO-US05028.  
 PR 10-MAR-1999; 99US-0123618.  
 PR 12-MAR-1999; 99US-0123957.  
 PR 23-MAR-1999; 99US-0125775.  
 PR 12-APR-1999; 99US-0128849.  
 PR 20-APR-1999; 99WO-US08615.  
 PR 28-APR-1999; 99US-0131445.  
 PR 04-MAY-1999; 99US-0132371.  
 PR 14-MAY-1999; 99US-0134287.  
 PR 02-JUN-1999; 99WO-US12252.  
 PR 23-JUN-1999; 99US-0141037.  
 PR 20-JUL-1999; 99US-0144758.  
 PR 26-JUL-1999; 99US-0145698.  
 PR 01-SEP-1999; 99WO-US0111.  
 PR 08-SEP-1999; 99WO-US0594.  
 PR 13-SEP-1999; 99WO-US0944.  
 PR 15-SEP-1999; 99WO-US1109.  
 PR 19NOV-1999; 99WO-US21547.  
 PR 05-OCT-1999; 99WO-US23089.  
 PR 29-OCT-1999; 99US-0162506.  
 PR 29-Nov-1999; 99WO-US28214.  
 PR 30-NOV-1999; 99WO-US28313.  
 PR 30-NOV-1999; 99WO-US28409.  
 PR 01-DEC-1999; 99WO-US28301.  
 PR 01-DEC-1999; 99WO-US28634.  
 PR 02-DEC-1999; 99WO-US28851.  
 PR 02-DEC-1999; 99WO-US28854.  
 PR 02-DEC-1999; 99WO-US288565.  
 PR 16-DEC-1999; 99WO-US30095.  
 PR 20-DEC-1999; 99WO-US0999.  
 PR 30-DEC-1999; 99WO-US12174.  
 PR 05-JAN-2000; 2000WO-US00219.  
 PR 06-JAN-2000; 2000WO-US00277.  
 PR 06-JAN-2000; 2000WO-US00376.  
 PR 11-FEB-2000; 2000WO-US03565.  
 PR 18-FEB-2000; 2000WO-US04341.  
 PR 18-FEB-2000; 2000WO-US04342.  
 PR 22-FEB-2000; 2000WO-US04414.  
 XX  
 PA (GETH ) GENENTECH INC.  
 XX  
 PI Ashkenazi AJ, Baker KP, Goddard A, Gurney AL, Hebert C, Henzel W;  
 PI Kabakoff RC, Lu Y, Pan J, Pennica D, Shelton DL, Smith V;  
 PI Stewart TA, Tumas D, Watanaabe CK, Wood WI, Yan M;  
 XX  
 DR WPI; 2000-572271/53.  
 XX  
 PR 60-FEB-2000; AAC58622.  
 XX  
 PT Sixty four PRO polypeptides, useful in the diagnosis and treatment of  
 PT immune related disorders, e.g. systemic lupus erythematosis, rheumatoid  
 PT arthritis, osteoarthritis, thyroiditis, thyroditis and diabetes mellitus -  
 XX  
 PS Claim 33; Fig 88; 309P; English.

The present invention describes sixty four human PRO proteins which can be used in the treatment of immune related diseases. The human PRO proteins, anti-PRO antibodies, agonists and antagonists are useful for treating and diagnosing immune related disorders. The disorders are selected from systemic lupus erythematosus, rheumatoid arthritis, osteoarthritis, juvenile chronic arthritis, spondyloarthropathies, systemic sclerosis, idiopathic inflammatory myopathies, Sjogren's syndrome, systemic vasculitis, sarcoidosis, autoimmune haemolytic anaemia, autoimmune thrombocytopaenia, thyroiditis, diabetes mellitus, immune-mediated renal disease, demyelinating diseases of the central and peripheral nervous systems, hepatobiliary diseases, inflammatory bowel disease, gluten-sensitive enteropathy and Whipple's disease, autoimmune or immune-mediated skin diseases, allergic diseases, immunological diseases of the lung, and transplantation associated diseases including graft rejection and graft-versus-host disease. AAC5397 to AAC5878 represent PCR primers and hybridisation probes used in the isolation of human PRO sequences. AAC5879 to AAC5862 and ABAB3414 to ABAB3477 represent human PRO polynucleotide and protein sequences given in the genomic location of the present invention.

Sequences given in

XX OS Homo sapiens.  
 XX DE Human polypeptide, SEQ ID NO: 2845.  
 FH XX  
 FT Location/Qualifiers 1..30  
 Peptide /label= signal\_peptide  
 Protein 31..310  
 FT /label= IgFAM-6  
 FT Domain 46..117  
 FT /label= Ig\_domain 153..221  
 FT /label= Ig\_domain 238..260  
 FT /label= transmembrane\_domain  
 PN EP1130094-A2.  
 PN WO200029583-A2.  
 PD 05-SEP-2001.  
 XX PR 07-JUL-2000; 2000EP-0114089.  
 XX PR 08-JUL-1999; 99JP-0194486.  
 PR 11-JAN-2000; 2000JP-018774.  
 PR 02-MAY-2000; 2000JP-0183765.  
 XX PA (HELI-) HELIX RES INST.  
 XX PI Ota T, Nishikawa T, Isogai T, Hayashi K, Ishii S, Kawai Y;  
 PI Lu DAM, Lal P, Hillman JL, Yang J; Wakamatsu A, Sugiyama T, Nagai K, Kojima S, Otsuki T, Koga H;  
 XX DR WPI; 2001-524255/58.  
 DR N-PSDB; RAK94243.  
 XX PT 830 Primers useful for synthesizing full length cDNA clones and their  
 PT use in genetic manipulation -  
 XX PS Claim 8; SEQ ID NO 2845; 1380pp + sequence listing; English.  
 XX CC The invention relates to primers for synthesising full length cDNA  
 CC clones. 830 cDNA molecules encoding a human protein have been  
 CC isolated and nucleotide sequences of 5'- and 3'-ends of the cDNA  
 CC molecules have been determined. Primers for synthesising the full length  
 CC cDNA are useful for clarifying the function of the protein encoded by  
 CC the cDNA. The full length clones were obtained by construction of full  
 CC length enriched cDNA libraries that were synthesised by the oligo-capping  
 CC method. The primers enable the production of the full length cDNA easily  
 CC without any special methods. The present sequence is a polypeptide  
 CC encoded by a full length human cDNA of the invention.  
 CC Note. The sequence data for this patent did not form part of the printed  
 CC specification, but was obtained in CD-ROM format directly from EPO.  
 XX SQ Sequence 310 AA;  
 Query Match 7.7%; Score 24; DB 21; Length 310;  
 Best Local Similarity 100.0%; Pred. No. 1.2e-14;  
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 CC Systemic lupus erythematosus and ulcerative colitis), complications of  
 CC cancer, haemodialysis and extracorporeal circulation, trauma and  
 CC haematopoietic cancer (such as leukaemia) and infections caused by  
 CC bacteria, viruses, fungi or parasites.  
 XX Sequence 310 AA;  
 RESULT 10  
 AAM93905  
 ID AAM93905 Standard; Protein: 310 AA.  
 XX AC AAM93905;  
 XX DT 06-NOV-2001 (first entry)  
 DE Human polypeptide, SEQ ID NO: 4051.  
 XX KW Human; full length cDNA; cDNA synthesis; oligo-capping.  
 XX OS Homo sapiens.  
 XX AC AAM93323 standard; Protein: 310 AA.  
 XX AC AAMG3323;  
 XX DT 06-NOV-2001 (first entry)  
 AAMG3323  
 ID AAM93323  
 XX AC AAMG3323;  
 XX DT 06-NOV-2001 (first entry)

PR	08-JUL-1999;	99JP-0194486.	XX
PR	11-JAN-2000;	2000JP-0118774.	XX
PR	02-MAY-2000;	2000JP-0183765.	XX
PA	( HELI- ) HELIX RES INST.		XX
PI	Ota T, Nishikawa T, Isogai T, Hayashi K, Ishii S, Kawai Y;		PI
PI	Wakamatsu A, Sugiyama T, Nagai K, Kojima S, Otsuki T, Koga H;		PI
XX			XX
DR	WPI; 2001-524255-58.		DR
DR	N-PSDB; AAK94867.		DR
PT	830 Primers useful for synthesizing full length cDNA clones and their use in genetic manipulation -		PT
PT	use in genetic manipulation -		PT
XX			XX
PS	Claim 8; SEQ ID NO 4051; 1380pp + sequence listing; English.		PS
XX			XX
CC	The invention relates to primers for synthesising full length cDNA clones. 830 cDNA molecules encoding a human protein have been isolated and nucleotide sequences of 5'- and 3'-ends of the cDNA molecules have been determined. Primers for synthesising the full length cDNA are useful for clarifying the function of the protein encoded by the cDNA. The full length clones were obtained by construction of full length enriched cDNA libraries that were synthesised by the oligo-capping method. The primers enable the production of the full length cDNA easily without any special methods. The present sequence is a polypeptide encoded by a full length human cDNA of the invention.		CC
CC	Note: The sequence data for this patent did not form part of the printed specification, but was obtained in CD-ROM format directly from EPO.		CC
SQ	Sequence 310 AA:		SQ
Query Match	7.7%; Score 24; DB 22; Length 310;		
Best Local Similarity	100.0%; Pred. No. 1.2e-14;		
Matches	24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;		
Oy	167 PRPHYSWYRNDVPLPTDSRANPFR 190		Oy
Db	167 prphyswyrndvplptdsranprf 190		Db
RESULT	11		RESULT
AAU12440	AAU12440 standard; Protein: 310 AA.		AAU12440;
ID			
XX			XX
DE	Human PRO1868 polypeptide sequence.		DE
XX			XX
Human secretory and transmembrane; PRO; mammalian; cancer; lung; breast; prostate; cervical; tumour necrosis factor-alpha; TNF-alpha; cartilage; ear; proliferation; glucose; free fatty acid; skeletal muscle; adipocyte; A-peptide; factor VIIA; gene therapy.			Human secretory and transmembrane; PRO; mammalian; cancer; lung; breast; prostate; cervical; tumour necrosis factor-alpha; TNF-alpha; cartilage; ear; proliferation; glucose; free fatty acid; skeletal muscle; adipocyte; A-peptide; factor VIIA; gene therapy.
XX			XX
OS	Homo sapiens.		OS
XX			XX
PN	WO20140466-A2.		PN
XX			XX
PD	07-JUN-2001.		PD
XX			XX
PF	01-DEC-2000; 2000WO-US32678.		PF
XX			XX
PR	01-DEC-1999; 99WO-US28101.		PR
PR	01-DEC-1999; 99WO-US28634.		PR
PR	02-DEC-1999; 99WO-US28851.		PR
PR	02-DEC-1999; 99WO-US28554.		PR
PR	02-DEC-1999; 99WO-US28555.		PR
PR	09-DEC-1999; 99US-0170252.		PR
PR			PR
PR	16-DEC-1999; 99WO-US30095.		PR
PR	20-DEC-1999; 99WO-US30911.		PR
PR	20-DEC-1999; 99WO-US30999.		PR
PR	30-DEC-1999; 99WO-US31243.		PR
PR	06-JAN-2000; 2000WO-US00277.		PR
PR	11-FEB-2000; 2000WO-US03376.		PR
PR	18-FEB-2000; 2000WO-US03565.		PR
PR	21-FEB-2000; 2000WO-US03442.		PR
PR	22-FEB-2000; 2000WO-US0414.		PR
PR	24-FEB-2000; 2000WO-US04914.		PR
PR	01-MAR-2000; 2000WO-US05601.		PR
PR	20-MAR-2000; 2000WO-US07377.		PR
PR	30-MAR-2000; 2000WO-US07532.		PR
PR	17-MAY-2000; 2000WO-US13705.		PR
PR	30-MAY-2000; 2000WO-US14042.		PR
PR	02-JUN-2000; 2000WO-US15264.		PR
PR	10-NOV-2000; 2000WO-US30873.		PR
PA	(GETH ) GENENTECH INC.		PA
PI	Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W, Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S; PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;		PI
XX			XX
DR	WPI; 2001-1408281/43.		DR
DR	N-PSDB; AAS21512.		DR
PT	Isolated, secretory and transmembrane PRO polypeptide used to detect other PRO polypeptides, link biactive molecules to cells expressing PT PRO polypeptides, and detect the presence of mammalian tumours e.g. PT lung, breast, prostate, cervical -		PT
XX			XX
PS	Claim 12; FIG 538; 813pp; English.		PS
XX			XX
CC	AAU12172-AAU12446 represent novel human secretory and transmembrane PRO polypeptides. The PRO polypeptides are useful to detect other PRO polypeptides, to link biactive molecules to cells expressing CC PRO polypeptides, to modulate biological activities of cells expressing CC PRO polypeptides, and to detect the presence of mammalian lung, colon, CC breast, prostate, rectal, cervical or liver tumours by comparing PRO CC polypeptide expression in a cell sample to that in a control sample. Some of the 275 sequences are also useful to stimulate the release of CC tumour necrosis factor-alpha (TNF-alpha) from human blood, the CC proliferation or differentiation of chondrocytes, the proliferation or CC gene expression in pericyte cells, the release of proteoglycans from CC cartilage, the proliferation of inner ear utricular supporting cells or CC of T-lymphocytes, the release of cytokine from peripheral blood monocytes (PBMCs), or the proliferation of endothelial cells. Some of CC the PRO polypeptides may modulate glucose or free fatty acid uptake by CC skeletal muscle cells or by adipocytes, or inhibit binding of A-peptide CC to factor VIIA. The PRO polypeptides can be used in assays to identify CC molecules involved in binding interactions. The polynucleotides encoding CC PRO polypeptides can be used to generate probes, antisense RNA/DNA, CC transgenic or knock out animals and can be used in gene therapy.		CC
SQ	Sequence 310 AA;		SQ
Query Match	7.7%; Score 24; DB 22; Length 310;		
Best Local Similarity	100.0%; Pred. No. 1.2e-14;		
Matches	24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;		
Oy	167 PRPHYSWYRNDVPLPTDSRANPFR 190		Oy
Db	167 prphyswyrndvplptdsranprf 190		Db
RESULT	12		RESULT
AAB80272			AAB80272

ID	AC	XX	AAB80272; standard; Protein; 310 AA..
XX	DE	24-APR-2001	(first entry)
XX	DE	Human PRO1868	protein.
XX	KW	Human; PRO; dermatological; anti-psoriatic; cytostatic; antiinflammatory; antiparkinsonian; nootropic; neuroprotective; vulnerary; cardiant; antiangiogenic; vasotropic; antiasthmatic; cancer; antiarthritic; antifungal; antidiabetic; antiviral; diabetes; ophthalmological; gene therapy; skin disease; gastrointestinal disorder; ischaemia; inflammation.	
XX	OS	Homo sapiens.	
PN	XX	WO200104311-A1.	
PP	XX	18-JAN-2001.	
PP	XX	22-FEB-2000; 2000WO-US04414.	
PR	XX	07-JUL-1999; 99US-0143048.	
PR	XX	26-JUL-1999; 99US-0145698.	
PR	XX	28-JUL-1999; 99US-0166222.	
PR	XX	08-SEP-1999; 99US-050594.	
PR	XX	13-SEP-1999; 99US-052094.	
PR	XX	15-SEP-1999; 99US-021090.	
PR	XX	15-SEP-1999; 99US-0521547.	
PR	XX	05-OCT-1999; 99US-022089.	
PR	XX	29-NOV-1999; 99US-02214.	
PR	XX	30-NOV-1999; 99US-02313.	
PR	XX	16-DEC-1999; 99US-031095.	
PR	XX	20-DEC-1999; 99US-031911.	
PR	XX	20-DEC-1999; 99US-031999.	
PR	XX	05-JAN-2000; 99US-00219.	
PA	XX	(GETH ) GENENTECH INC.	
PI	XX	Ashkenazi AJ, Botstein D, Desnoyers L, Eaton DL, Ferrara N, Flavroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goodard A, Godowski PJ, Grimaldi CJ, Gurney AL, Hillan KJ, Klagsbrun M, Mathier JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D; Williams PM, Wood WI;	
PT	XX	WPI: 2001-081051/09. N-SSDB; RAAF72433.	
PT	XX	Sixty one nucleic acids encoding PRO polypeptides which are useful in the treatment of skin diseases (e.g. psoriasis), cancers (e.g. lung squamous cell carcinoma) and neurodegenerative diseases (e.g. Alzheimer's disease) -	
PT	XX	The present sequence is one of sixty one novel secreted and transmembrane PRO polypeptides. The PRO polypeptides are useful for treating skin diseases (e.g. psoriasis), cancers (e.g. lung squamous cell carcinoma), gastrointestinal disorders (e.g. enterocolitis), neurodegenerative diseases (e.g. Alzheimer's disease, Parkinson's disease), wound repair, cardiovascular disorders (e.g. endometrial bleeding angiogenesis, ischaemias such as coronary ischaemia, atherosclerosis), inflammatory disorders (e.g. asthma, rheumatoid arthritis, multiple sclerosis), infertility, AIDS and diabetes and retinal disorders such as retinitis pigmentosum. The PRO nucleic acids have applications in molecular biology, including use as hybridization probes, and in chromosome and gene mapping.	
PS	XX	Claim 1; Fig 124; 393pp; English.	
SQ	XX	The present sequence is one of sixty one novel secreted and transmembrane PRO polypeptides. The PRO polypeptides are useful for treating skin diseases (e.g. psoriasis), cancers (e.g. lung squamous cell carcinoma), gastrointestinal disorders (e.g. enterocolitis), neurodegenerative diseases (e.g. Alzheimer's disease, Parkinson's disease), wound repair, cardiovascular disorders (e.g. endometrial bleeding angiogenesis, ischaemias such as coronary ischaemia, atherosclerosis), inflammatory disorders (e.g. asthma, rheumatoid arthritis, multiple sclerosis), infertility, AIDS and diabetes and retinal disorders such as retinitis pigmentosum. The PRO nucleic acids have applications in molecular biology, including use as hybridization probes, and in chromosome and gene mapping.	
RESULT	13		
QY	167	PRPHFSWYRNDVPPTDSRANPFR	190
Db	167	prphfswyrdvpptdsranprf	190
Best Local Similarity	100.0%	Score	24;
Matches	24;	Pred. No.	1.2e-14;
		Mismatches	0;
		Indels	0;
		Gaps	0
Query Match	7.7%	Length	310;
XX	XX	Sequence	310 AA;
SQ	XX	Query Match	7.7%; Score 24; DB 22; Length 310; Best Local Similarity 100.0%; Pred. No. 1.2e-14; Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0
QY	167	PRPHFSWYRNDVPPTDSRANPFR	190
Db	167	prphfswyrdvpptdsranprf	190
RESULT	14		
ID	AAB80408	AAB80408	standard; protein; 310 AA.

DE	Secreted protein encoded by gene #38.
XX	(HUMA-) HUMAN GENOME SCI INC.
XX	PA
KW	secreted protein; human; autoimmune; hyperproliferation;
KW	cardiovascular; cerebrovascular; infection; food.
XX	Homo sapiens.
XX	PN WO200107459-A1.
XX	PR 01-FEB-2001.
XX	PD 20-JUL-2000; 2000WO-US19735.
XX	PF 20-JUL-1999; 99US-0145220.
XX	PT (HUMA-) HUMAN GENOME SCI INC.
XX	PI Rosen CA, Ruben SM, Ebner R, Duan RD, Ni J, Soppet DR, Moore PA;
XX	PT Shl Y, Lafleur DW, Olsen HS, Birse CE, Komatsoulis GA;
XX	PT WPI; 2001-123261/13.
XX	DR
XX	PS New isolated nucleic acid encoding 29 secreted proteins, for
XX	PT diagnosing, preventing and treating e.g. autoimmune,
XX	PT hyperproliferative, cardiovascular, and ocular diseases or disorders
XX	PT and microorganism infections
XX	CC claim 11; Page 559-560; 601pp; English.
XX	PS Claim 11; Page 557-558; 601pp; English.
XX	CC The present invention relates to 29 human secreted proteins. The
CC	invention is used to prevent autoimmune diseases e.g. rheumatoid
CC	arthritis, hyperproliferative disorders e.g. neoplasms of the
CC	breast or liver, cardiovascular disorders e.g. cardiac arrest,
CC	cerebrovascular disorders e.g. cerebral ischemia, angiogenesis,
CC	nervous system disorders e.g. Alzheimer's disease, infections
CC	caused by bacteria, viruses and fungi and ocular disorders e.g.
CC	corneal infection. Also used in food preparations.
XX	XX Sequence 310 AA;
SQ	Query Match 7.7%; Score 24; DB 22; Length 310;
QY	Best Local Similarity 100.0%; Pred. No. 1.2e-14;
QY	Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Db	QY 167 PRPHYSWRNDVPLPTDSRANPRF 190
Db	167
167 prphyswryndvplptdsranprf 190	Db 167 prphyswryndvplptdsranprf 190
AC	RESULT 16
AC	AB38333
ID	ID AAB38333 standard; Protein; 311 AA.
XX	XX
AC	AC AAB38333;
AC	AC
DT	DT 31-JAN-2001 (first entry)
XX	XX DE Human secreted protein encoded by gene 13 clone HAPSA79.
XX	XX KW Immunosuppressive; antiarthritic; antirheumatic; antiproliferative;
KW	KW cytostatic; cardiotonic; vasoroprotective; neuroprotective;
KW	KW nootropic; antibacterial; virucide; fungicide; opthalmological; human;
KW	KW vulnerability; gene therapy; infection; secreted protein.
XX	XX OS Homo sapiens.
OS	OS PN WO200061623-A1.
XX	XX
XX	XX PD 19-OCT-2000.
XX	XX PF 06-APR-2000; 2000WO-US08979.
XX	XX PR 09-APR-1999; 99US-0128693.
PR	PR 26-APR-1999; 99US-0130991.
XX	XX PA (HUMA-) HUMAN GENOME SCI INC.
XX	XX PI Rosen SM, Ni J, Komatsoulis GA, Rosen CA, Soppet DR, Shi Y;
XX	PI Ruben SM, Ni J, Komatsoulis GA, Rosen CA, Soppet DR, Shi Y;
XX	PI Lafleur DW, Olsen HS, Ebner R, Florence KA, Moore PA, Birse CE;
XX	PI Young PE;
XX	XX DR WPI; 2000-647418/62.
XX	XX PT New nucleic acid molecules encoding 62 human secreted proteins for
PT	PT diagnosing, preventing, treating or ameliorating medical conditions and
PT	PT used as food additives or preservatives.

PS	Claim 11; Page 603-604; 716pp; English.
CC	Sequences AAB38321-B38396 represent the amino acid sequences of 62 human secreted proteins encoded by the genes AAC69312-CC9587. The genes and proteins are useful for preventing, ameliorating or treating medical conditions, e.g. by protein or gene therapy. The genes are isolated from a range of human tissues disclosed in the specification. The nucleic acids, proteins, antibodies and (ant)agonists are useful in the diagnosis, treatment and prevention of: (a) autoimmune diseases e.g. rheumatoid arthritis; (b) hyperproliferative disorders e.g. neoplasms of the breast or liver; (c) cardiovascular disorders e.g. cardiac arrest; (d) cerebrovascular disorders e.g. cerebral ischemia; (e) angiogenesis; (f) nervous system disorders e.g. Alzheimer's disease; (g) infections caused by bacteria, viruses and fungi; and (h) ocular disorders e.g. corneal infection. The polypeptides can also be used to aid wound healing and epithelial cell proliferation, to prevent skin aging due to sunburn, to maintain organs before transplantation, for supporting cell culture of primary tissues, to regenerate tissues and in chemotaxis.
CC	Sequence 311 AA;
QY	Query Match Best Local Similarity 100.0%; Score 24; DB 21; Length 311; Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0
Db	167 PRHYSWRNDVPLPTSRANPFR 190                                 167 PRPHYSWWRNDVPLPTSRANPFR 190
RESULT	17
ID	AAB38383 standard; Protein: 311 AA..
XX	
AC	AAB38383;
XX	
DE	Human secreted protein encoded by gene 13 clone HAPS479.
XX	
KW	Immunosuppressive; antiarthritic; antirheumatic; antiproliferative; cytostatic; cardiotonic; vasotropic; cerebroprotective; neuroprotective; neutroporic; antibacterial; virucide; fungicide; opthalmological; human; pulmonary; gene therapy; infection; secreted protein.
KW	
	Homo sapiens.
PN	WO200061623-A1.
XX	
PD	19-CCT-2000.
XX	
PF	05-APR-2000; 2000WO-US08979.
PF	
PR	09-APR-1999; 99US-0128693.
PR	
XX	26-APR-1999; 99US-0130991.
XX	
PA	(HUMA-) HUMAN GENOME SCI INC.
XX	
PI	Ruben SM, Ni J, Komatsoulis GA, Rosen CA, Soppet DR, Shi Y; Lafleur DW, Olsen HS, Ebner R, Florence KA, Moore PA, Birse CE; Young PE;
XX	
DR	WPI; 2000-647418/62.
XX	
PT	New nucleic acid molecules encoding 62 human secreted proteins for PT diagnosing, preventing, treating or ameliorating medical conditions and used as food additives or preservatives -
PS	Claim 11; Page 642-643; 716pp; English.
XX	

CC	conditions, e.g. by protein or gene therapy.
CC	the genes are isolated from a range of human tissues disclosed in the specification. The nucleic acids, proteins, antibodies and (ant)agonists are useful in the diagnosis, treatment and prevention of: (a) autoimmune diseases e.g. rheumatoid arthritis, hyperproliferative disorders e.g. neoplasms of the breast or liver; (b) cardiovascular disorders e.g. cerebral angiogenesis; (c) cardiovascular disorders e.g. cerebral ischemia; (e) infections caused by bacteria, viruses and fungi; and (h) ocular disorders e.g. corneal infection. The polypeptides can also be used to aid wound healing and epithelial cell proliferation, to prevent skin aging due to sunburn, to maintain organs before transplantation, for supporting cell culture of primary tissues, to regenerate tissues and innervate tissue.
CC	chemotaxis.
CC	Sequence 311 AA;
SQ	
RESULT 19	Query Match 7.7%; Score 24; DB 21; Length 311; Best Local Similarity 100%; Pred. No. 1.2e-14; Mismatches 0; Indels 0; Gaps 0; Latches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
DB	167 PRPHYSWYRNDVPLPFDNSRANPFR 190 167 prphyswyrndvplpfdsrnprf 190
ID	AAB80431 standard; peptide; 339 AA.
AC	AAB80431;
XX	
DT	24-APR-2001 (first entry)
XX	
DE	Gene #13 associated peptide #1.
XX	
KW	Secreted protein; human; autoimmune; hyperproliferation; cardiovascular; cerebrovascular; infection; food.
XX	
OS	Homo sapiens.
XX	
PN	WO200107459-A1.
XX	
PD	01-FEB-2001.
XX	
PF	20-JUL-2000; 2000WO-US19735.
XX	
	23-JUL-1999; 99US-0145220.
(HUMA-) HUMAN GENOME SCI INC.	
XX	
PI	Rosen CA, Ruben SM, Ebner R, Duan RD, Ni J, Soppet DR, Moore PA;
PI	Shi Y, Lafleur DW, Olsen HS, Blrise CE, Komatsoulis GA;
DR	wpi; 2001-123261/13.
XX	
PT	New isolated nucleic acid encoding 29 secreted proteins, for diagnosing, preventing and treating e.g. autoimmune, hyperproliferative, cardiovascular, and ocular diseases or disorders and microorganism infections -
PT	
PS	Disclosure; Page 75; 601pp; English.
PS	
CC	The present invention relates to 29 human secreted proteins. The invention is used to prevent autoimmune diseases e.g. rheumatoid arthritis, hyperproliferative disorders e.g. neoplasms of the breast or liver, cardiovascular disorders e.g. cardiac arrest, cerebrovascular disorders e.g. cerebral ischemia, angiogenesis, nervous system disorders e.g. Alzheimer's disease, infections caused by bacteria, viruses and fungi and ocular disorders e.g. cornual infection. Also used in food preparations.
CC	

SQ	Sequence	339 AA:
Query Match	7.7%	Score 24; DB 22; Length 339;
Best Local Similarity	100.0%	Pred. No. 1.3e-14; Mismatches 0; Indels 0; Gaps 0;
Matches	24;	Conservative 0; MisMatches 0;
XX	ABG12109	Db 196 prphyswryndvplptdsranprf 219
RESULT 20		
ID	ABG12109 standard; Protein; 404 AA.	
XX	ABG12109;	
AC		
XX	18-FEB-2002 (first entry)	
DT		
XX	Novel human diagnostic protein #12100.	
DE		
XX	Human; chromosome mapping; gene mapping; gene therapy; forensic; food supplement; medical imaging; diagnostic; genetic disorder.	
KW		
XX	Homo sapiens.	
OS		
XX	W0200175067-A2.	
PN		
PD	11-OCT-2001.	
XX		
PF	30-MAR-2001; 2001WO-US08631.	
XX		
PR	31-MAR-2000; 2000US-0540217.	
PR	23-AUG-2000; 2000US-0649167.	
XX		
PA	(HYSE-) HYSEQ INC.	
XX		
PI	Dumanac RT, Liu C, Tang YT;	
XX		
DR	WIPO; 2001-639362/73.	
DR	N-PSSB; AAS76296.	
XX		
PT	New isolated Polynucleotide and encoded polypeptides, useful in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits and to assess PT biodiversity -	
PT		
XX		
PS	Claim 20; SEQ ID NO 42468; 103pp; English.	
XX		
CC	The invention relates to isolated polynucleotide (I) and	
CC	polypeptide (II) sequences. (I) is useful as hybridization probes, polymerase chain reaction (PCR) primers, oligomers, and for chromosome	
CC	and gene mapping, and in recombinant production of (II). The	
CC	polynucleotides are also used in diagnostics as expressed sequence tags	
CC	to identify expressed genes. (I) is useful in gene therapy techniques	
CC	to restore normal activity of (II) or to treat disease states involving	
CC	(II). (II) is useful for generating antibodies against it, detecting or quantitating a polypeptide in tissue, as molecular weight markers and as a food supplement. (II) and its binding partners are useful in medical	
CC	imaging of sites expressing (II). (I) and (II) are useful for treating disorders involving aberrant protein expression or biological activity.	
CC	The polypeptide and polynucleotide sequences have applications in	
CC	diagnostics, forensics, gene mapping, identification of mutations	
CC	responsible for genetic disorders or other traits to assess biodiversity	
CC	and to produce other types of data and products dependent on DNA and amino acid sequences. ABG0010-ABG0377 represent novel human	
CC	diagnostic amino acid sequences of the invention.	
CC	Note: The sequence data for this patent did not appear in the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.	
SQ	Sequence	404 AA;



Query Match 4.8%; Score 15; DB 22; Length 68;  
 Best Local Similarity 100.0%; Pred. No. 1.3e-06; Mismatches 0; Indels 0; Gaps 0;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 58 SQTSDPRIEWKKIQQ 72  
 ID ||||||| 72  
 Db 37 sqtsdpriewkkqd 51

RESULT 23  
 AY11472 standard; Protein: 89 AA.  
 XX  
 AC AY11472;  
 XX  
 DT 21-JUN-1999 (first entry)  
 XX  
 DE Human 5' EST secreted protein SEQ ID NO 294.  
 XX  
 KW Human; secreted protein; EST; expressed sequence tag; diagnosis; forensic; forensic; gene therapy; chromosome mapping; signal peptide; upstream regulatory sequence; cytokine activity; cell proliferation; differentiation; haematoopoiesis regulation; tissue growth regulation; reproductive hormone regulation; chemotactic; chemokinetic; haemostatic; thrombolytic; anti-inflammatory; tumour inhibition.

XX  
 OS Homo sapiens.  
 XX  
 PN WO9906551-A2.  
 XX  
 PD 11-FEB-1999.  
 XX  
 PF 31-JUL-1998; 9BWO-IB01235.  
 XX  
 PR 01-AUG-1997; 97US-0905133.  
 XX  
 PA (GEST ) GENSET.  
 XX  
 PI Ductlert A, Dumas Milne Edwards J, Lacroix B;  
 XX  
 DR WPI: 1999-153781/13.  
 XX  
 PT N-PSDB; AAX3958.  
 XX  
 PT New nucleic acids encoding human secreted - proteins obtained from CDNA libraries prepared from substantia nigra, cerebellum, surrenals and fetal brain tissue  
 PS Claim 34; Page 394; 434pp; English.

AAX39440 to AAX39597 represent 5' expressed sequence tags (ESTs) for human secreted proteins, and encode the proteins given in AAY1174 to AAY11531, respectively. The proteins given represent the signal peptide and an N-terminal fragment of a secreted protein. The nucleic acid sequences can be used for producing secreted human gene products. They can also be used to develop products for diagnosis and therapy. The proteins obtained may have cykine activity, cell proliferation/differentiation activity, haematoopoiesis regulating activity, tissue growth regulating activity, reproductive hormone and thrombolytic activity, receptor/ ligand activity, anti-inflammatory activity, tumour inhibition activity or other activities. The products can be used in forensic, gene therapy and chromosome mapping procedures. The sequences can also be used for obtaining corresponding promoter sequences. The nucleic acids encoding the signal peptide can be used for directing extracellular secretion of a polypeptide or the insertion of a polypeptide into a membrane, or importing a polypeptide into a cell.

XX  
 SQ Sequence 89 AA;

Query Match 3.2%; Score 10; DB 22; Length 267;  
 Best Local Similarity 100.0%; Pred. No. 0.27; Mismatches 0; Indels 0; Gaps 0;  
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 58 SQTSDPRIEWKKIQQ 72  
 ID ||||||| 72  
 Db 58 sqtsdpriewkkqd 72

RESULT 24  
 ABG27038 ABG27038 standard; Protein: 267 AA.  
 XX  
 AC ABG27038;  
 XX  
 DT 18-FEB-2002 (first entry)  
 XX  
 DE Novel human diagnostic protein #27029.  
 XX  
 KW Human; chromosome mapping; gene mapping; gene therapy; forensic; food supplement; medical imaging; diagnostic; genetic disorder.

XX  
 OS Homo sapiens.  
 XX  
 PN WO200175067-A2.  
 XX  
 PR 31-MAR-2000; 2000US-0540217.  
 PR 23-AUG-2000; 2000US-0649167.  
 XX  
 PA (HYSE-) HYSEQ INC.  
 XX  
 PT Drmanac RT, Liu C, Tang YT;  
 XX  
 DR WPI; 2001-639362/73.  
 DR N-PSDB; AAS91225.

XX  
 PT New isolated polynucleotide and encoded polypeptides, useful in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits and to assess biodiversity.

XX  
 PS Claim 20; SEQ ID NO 57397; 103pp; English.

The invention relates to isolated polynucleotide (I) and polypeptide (II) sequences. (I) is useful as hybridisation probes, polymerase chain reaction (PCR) primers, oligomers, and for chromosome and gene mapping, and in recombinant production of (II). The polynucleotides are also used in diagnostics as expressed sequence tags for identifying expressed genes. (I) is useful in gene therapy techniques to restore normal activity of (II) or to treat disease states involving (II). (II) is useful for generating antibodies against it, detecting or quantitating a polypeptide in tissue, as molecular weight markers and as a food supplement. (II) and its binding partners are useful in medical imaging of sites expressing (II). (I) and (II) are useful for treating disorders involving aberrant protein expression or biological activity. The polypeptide and polynucleotide sequences have applications in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits to assess biodiversity and to produce other types of data and products dependent on DNA and amino acid sequences. ABC00010-ABG30377 represent novel human diagnostic amino acid sequences of the invention.

Note: The sequence data for this patent did not appear in the printed specification, but was obtained in electronic format directly from WIPO at [http://www.wipo.int/pdb/published\\_pct\\_sequences](http://www.wipo.int/pdb/published_pct_sequences).

XX  
 SQ Sequence 267 AA;

QY 244 GRIGGVVVL 253  
 |||||  
 ID AAW01191 standard; Peptide; 48 AA.  
 XX  
 Db 135 ggggvvvl 144

RESULT 25  
 AAW01191  
 ID AAW01191 standard; Peptide; 48 AA.  
 XX  
 AC AAW01191;  
 XX  
 DT 15-MAR-1997 (first entry)  
 XX  
 DE Serine protease PfSP12-52 N-terminal fragment.  
 XX  
 KW Flea; midgut; serine protease; PfSP12-52; vaccine; domestic animal; infestation; insecticide; protease-inhibitor; controlled release formulation; synergist.  
 KW  
 XX  
 Siphonaptera sp.  
 FH Key Location/Qualifiers  
 FT Peptide 1..19  
 /Note= "Signal peptide"  
 FT Peptide 20..48 /Note= "Part of N-terminal fragment AAW01177"  
 XX  
 PN W09611706-A1.  
 XX  
 PD 25-APR-1996.  
 XX  
 PT 18-OCT-1995; 95WO-US14442.  
 XX  
 PR 07-JUN-1995; 95US-0485455.  
 PR 18-OCT-1994; 94US-0326773.  
 PR 07-JUN-1995; 95US-0482130.  
 PR 07-JUN-1995; 95US-0484211.  
 PR 07-JUN-1995; 95US-0485443.  
 PR 07-JUN-1995; 95US-0485455.  
 PR 07-JUN-1995; 97WO-US14442.  
 XX  
 PA (PARA-) PARAVAX INC.  
 XX  
 PI Arfsten A, Dale B, Frank GR, Grieve RB, Heath R; Hunter SW, Rushlow KE, Stiegler GL; (HESK-) HESKA CORP.  
 XX  
 DR WPI; 1996-221762/22.  
 DR N-PSDB; AAT40836.

DNA encoding Flea serine protease and aminopeptidase - useful in vaccines to protect animals from flea infestation.  
 XX  
 PS Claim 71; Page 163; 241pp; English.  
 XX  
 CC This sequence represents a partial N-terminal sequence of flea midgut serine protease, SpI2-52, isolated from a flea cDNA library by homology with conserved serine protease sequences. The sequence contains part of N-terminal sequence AAW01177, and other SP12 sequences are given in AAW01197 (C-terminal sequence) and AAW01209 (PfSP12-6-69). The peptide may be used in a vaccine for protection of domestic animals from flea infestation, or in isolation of protease-inhibitors which may be used in controlled release formulations to reduce the flea burden on and around the animal. The inhibitors may be included in insecticidal compositions to increase efficacy of other active agents, by reducing proteolytic activity in the flea midgut.  
 CC  
 XX  
 SQ Sequence 48 AA;

Query Match 2.6%; Score 8; DB 17; Length 48;  
 Best Local Similarity 100.0%; Pred. No. 5;  
 Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 252 VLVVLAVI 259  
 |||||  
 ID AAB50588 standard; Protein; 48 AA.  
 XX  
 AC AAB50588;  
 XX  
 DT 19-MAR-2001 (first entry)  
 XX  
 DE Flea serine protease nfSP12 N-terminal protein sequence #65.  
 XX  
 KW Flea; cat flea; serine protease; aminopeptidase; cysteine protease; flea infestation; proteolytic; insecticide; vaccine; cat; dog; dog flea; Ctenocephalides felis; Ctenocephalides canis; Pulex irritans; ectoparasite.  
 KW  
 XX  
 OS Ctenocephalides felis.  
 XX  
 PT US150125-A.  
 XX  
 PD 21-NOV-2000.  
 XX  
 PR 24-APR-1996; 96US-0639075.  
 XX  
 PR 13-DEC-1991; 91US-0806482.  
 PR 18-OCT-1994; 94US-0326773.  
 PR 07-JUN-1995; 95US-0482130.  
 PR 07-JUN-1995; 95US-0484211.  
 PR 07-JUN-1995; 95US-0485443.  
 PR 07-JUN-1995; 95US-0485455.  
 PR 15-AUG-1997; 97WO-US14442.  
 XX  
 PA (HESK-) HESKA CORP.  
 XX  
 PI Gaines PJ, Silver G, Rushlow KE, Hunter SW, Frank GR, Stiegler GL;  
 PI Grieve RB;  
 XX  
 DR N-PSDB; AAC908844.  
 XX  
 PT New isolated flea proteins with proteolytic activity, useful for preventing and reducing flea infestations in mammals, especially cats and dogs -  
 XX  
 PS Claim 1; Column 47-48; 150pp; English.  
 XX  
 CC The present invention describes isolated flea serine protease, aminopeptidase and cysteine protease protein (I). Also described is a method for identifying a compound (II) capable of inhibiting flea protease activity comprising: (a) contacting (I) with a protease substrate and a putative inhibitory compound, where (I) has proteolytic activity in the absence of the compound; and (b) determining if the compound inhibits protease activity by detecting cleavage of the protease substrate, where decreased cleavage of the protease substrate indicates an inhibitory compound. (I), nucleic acid molecules encoding (I), and antibodies immunospecific for (I) and (II) are useful for preventing and reducing flea infestations, particularly the species Ctenocephalides felis (cat fleas), Ctenocephalides canis (dog fleas) and Pulex irritans, in animals, preferably cats and dogs. They are also useful for reducing infestation by other ectoparasites, preferably mosquitoes, midges, sandflies, blackflies, ticks and Rhodnius. AAC90818 to AAC90913 and AAB5051 to AAB50644 represent sequences used in the exemplification of the present invention.  
 CC  
 XX  
 SQ Sequence 48 AA;

Query Match 2.6%; Score 8; DB 22; Length 48;  
 Best Local Similarity 100.0%; Pred. No. 5;



AC AAB41974;  
 AC  
 XX DT 02-JUL-1998 (first entry)  
 XX DE Flea serine protease SEQ ID NO:129.  
 XX KW Flea; Siphonaptera; protease; vaccine; prophylaxis; infestation;  
 KW immunoglobulin protease; larvae; host animal.  
 XX OS Siphonaptera.  
 XX  
 FH Key Location/Qualifiers  
 FT Misc-difference 241  
 /Note= "encoded by TAA, a stop codon"  
 XX PN W09740058-A1.  
 XX RD 30-OCT-1997.  
 XX 24-APR-1997; 97WO-US06121.  
 XX PR 04-APR-1997; 97US-0042945.  
 PR 24-APR-1996; 96US-0639075.  
 PR 15-NOV-1996; 96US-0749699.  
 XX PA (HESK-) HESKA CORP.  
 XX PI Frank GR, Gaines PJ, Grieve RB, Hunter SW, Rushlow KE;  
 PI Silver G, Stiegler GL;  
 DR XX WPI; 1998-076762/07.  
 DR N-FSDB; AAV04597.  
 PT New flea protease genes and proteins - used in vaccine compositions  
 PT for the prophylaxis and treatment of flea infestation, especially in  
 cats or dogs  
 PT  
 PS Claim 2; Page 260-261; 318pp; English.  
 XX  
 CC The present sequence represents a novel flea serine protease. The  
 protein, as well as the DNA encoding the protein, may all be used in  
 therapeutic compositions to reduce flea protease activity (especially in  
 immunoglobulin protease) and so reduce flea infestation especially in  
 cats or dogs. Alternatively, flea larvae may ingest the faeces of adult  
 fleas which comprises anti-protease antibodies produced by a host animal  
 in response to administration of the protein. Therapeutic compositions  
 may further comprise a compound that reduces haematophagous ectoparasite  
 burden by a method other than by reducing flea immunoglobulin protease  
 activity. The novel flea DNA encoding the protein can also be used to  
 produce recombinant protein and fragments of it are used as probes and  
 primers for identification and isolation of related sequences, also as  
 antisense, triplex-forming agents and ribozymes for inhibition of the  
 synthesis of the protein. All are also useful for screening expression  
 libraries, to purify the protein and to target cytotoxins to fleas.  
 CC SQ Sequence 246 AA;

Query Match 2.6%; Score 8; DB 19; Length 246;  
 Best Local Similarity 100.0%; Pred. No. 21; Mismatches 8; Conservative 0; Indels 0; Gaps 0;  
 Matches 0;

Qy 252 VLVVLAVI 259  
 |||||  
 Db 2 vlvvlavi 9

AC AAB50616;  
 AC  
 XX DT 19-MAR-2001 (first entry)  
 XX DE Flea serine protease pfSP12-246 protein sequence #127.  
 XX KW Flea; cat flea; serine protease; aminopeptidase; cysteine protease;  
 KW flea infestation; proteolytic; insecticide; vaccine; cat; dog; flea;  
 Ctenocephalides felis; Ctenocephalides canis; Pulex irritans;  
 KW ectoparasite.  
 XX OS Ctenocephalides felis.  
 XX PN US6150125-A.  
 XX PD 21-NOV-2000.  
 XX PR 24-APR-1996; 96US-0639075.  
 XX PR 13-DEC-1991; 91US-0806482.  
 PR 18-OCT-1994; 94US-0366773.  
 PR 07-JUN-1995; 95US-04822130.  
 PR 07-JUN-1995; 95US-0484211.  
 PR 07-JUN-1995; 95US-04855443.  
 PR 07-JUN-1995; 95US-01815455.  
 PR 15-AUG-1997; 97WO-US14442.  
 XX PA (HESK-) HESKA CORP.  
 XX PI Gaines PJ, Silver G, Rushlow KE, Hunter SW, Frank GR, Stiegler GL;  
 PI Grieve RB;  
 DR XX WPI; 2001-136374/14.  
 DR N-FSDB; AAC90878.  
 PT New isolated flea proteins with proteolytic activity, useful for  
 PT preventing and reducing flea infestations in mammals, especially cats  
 PT and dogs -  
 XX PS Claim 1; Column 195-198; 150pp; English.  
 XX  
 CC The present invention describes isolated flea serine protease,  
 CC aminopeptidase and cysteine protease proteins (I). Also described is a  
 CC method for identifying a compound (II) capable of inhibiting flea  
 protease activity comprising: (a) contacting (I) with a protease  
 CC substrate and a putative inhibitory compound, where (I) has proteolytic  
 CC activity in the absence of the compound; and (b) determining if the  
 CC compound inhibits protease activity by detecting cleavage of the  
 CC protease substrates, where decreased cleavage of the protease substrate  
 CC indicates an inhibitory compound. (I), nucleic acid molecules encoding  
 CC (I), and antibodies immunospecific for (I) and (II) are useful for  
 CC preventing and reducing flea infestations, particularly the species  
 Ctenocephalides felis (cat fleas), Ctenocephalides canis (dog fleas) and  
 CC Pulex irritans, in animals, preferably cats and dogs. They are also  
 CC useful for reducing infestation by other ectoparasites, preferably  
 CC mosquitoes, midges, sandflies, blackflies, ticks and Rhodnius. AAC90818  
 CC to AAC9013 and AAB5051 to AAB0644 represent sequences used in the  
 CC exemplification of the present invention.  
 XX  
 SQ Sequence 246 AA;

Query Match 2.6%; Score 8; DB 22; Length 246;  
 Best Local Similarity 100.0%; Pred. No. 21; Mismatches 8; Conservative 0; Indels 0; Gaps 0;  
 Matches 0;

Qy 252 VLVVLAVI 259  
 |||||  
 Db 2 vlvvlavi 9

RESULT 30  
 AAB50616  
 ID AAB50616 standard; Protein; 246 AA.  
 XX  
 RESULT 31  
 AAC93112

GenCore version 4.5  
 Copyright (c) 1993 - 2000 Compugen Ltd.

ON protein - protein search, using sw model

Run on: September 19, 2002, 17:32:47 ; Search time 23.64 Seconds  
 (without alignments)  
 320.302 Million cell updates/sec

Title: US-09-524-531C-13  
 Perfect score: 310  
 Sequence: 1 MALSRRLRLYARLPHEFL.....VNWIRNSEEQDFRRHKSSFV 310  
 Scoring table: OLIGO  
 Gapov 60.0 , Gapext 60.0

Searched: 231628 seqs, 24425594 residues

Total number of hits satisfying chosen parameters: 231628

Minimum DB seq length: 0  
 Maximum DB seq length: 200000000

Post-processing: Listing first 75 summaries

Database : Issued\_Patents\_AA:\*

1: /cgn2\_6/pctodata/2/iaa5A.COMB.pep:\*

2: /cgn2\_6/pctodata/2/iaa75\_COMB.pep:\*

3: /cgn2\_6/pctodata/2/iaa6A.COMB.pep:\*

4: /cgn2\_6/pctodata/2/iaa16B.COMB.pep:\*

5: /cgn2\_6/pctodata/2/iaa16C.COMB.pep:\*

6: /cgn2\_6/pctodata/2/iaa\_backfiles1.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match Length	DB ID	Description
1	8	2.6	48 1	US-08-485-455D-65
2	8	2.6	48 2	US-08-482-110C-65
3	8	2.6	48 2	US-08-484-211C-65
4	8	2.6	48 3	US-08-906-769-65
5	8	2.6	48 3	US-08-906-616-65
6	8	2.6	48 4	US-08-817-795-65
7	8	2.6	48 4	US-08-485-443B-65
8	8	2.6	48 4	US-08-639-075A-65
9	8	2.6	48 4	US-09-012-431-65
10	8	2.6	48 4	US-09-012-692-65
11	8	2.6	48 4	US-08-806-613-65
12	8	2.6	48 5	PCT-US5-1442A-65
13	8	2.6	246 3	US-08-905-769-127
14	8	2.6	246 3	US-08-806-616-127
15	8	2.6	246 4	US-08-639-075A-127
16	8	2.6	246 4	US-09-012-431-127
17	8	2.6	246 4	US-09-012-692-127
18	8	2.6	246 3	US-08-906-613-127
19	7	2.3	170 3	US-09-189-035-2
20	7	2.3	170 4	US-09-382-086-2
21	7	2.3	249 2	US-09-154-802-1
22	7	2.3	249 3	US-09-373-029-1
23	7	2.3	758 4	US-9-413-814-32
24	7	2.3	775 1	US-07-603-133B-15
25	7	2.3	775 1	US-07-603-133B-16
26	7	2.3	1186 2	US-08-861-464-8
27	7	2.3	1186 2	US-08-396-001-8

RESULT 1  
 US-08-485-455D-65  
 ; Sequence 65, Application US/08485455D  
 ; Patent No. 51712143

GENERAL INFORMATION:  
 APPLICANT: Gieve, Robert B.  
 APPLICANT: Rushlow, Keith E.  
 APPLICANT: Wu Hunter, Shirley  
 APPLICANT: Frank, Glenn R.  
 APPLICANT: Stiegler, Gary L.

TITLE OF INVENTION: FLEA PROTEASE PROTEINS- NUCLEIC ACID  
 TITLE OF INVENTION: MOLECULES, AND USES THEREOF  
 NUMBER OF SEQUENCES: 79

## CORRESPONDENCE ADDRESS:

ADDRESSEE: Sheridan Ross P.C.

STREET: 1700 Lincoln Street, Suite 3500

CITY: Denver

STATE: Colorado

ZIP: 80203

Sequence 8, Appli	Sequence 15, Appli	Sequence 164, App	Sequence 276, App
7	2.3	1186 4	US-09-323-433A-8
29	7	1395 4	US-09-440-245A-15
30	6	14 2	US-08-885-589A-164
31	6	1.9	US-09-227-357-276
32	6	1.9	US-07-660-510-4
33	6	1.9	US-07-860-510-5
34	6	1.9	US-07-796-361A-15
35	6	1.9	US-07-960-510-6
36	6	1.9	US-07-1673-7
37	6	1.9	US-09-053-197A-72
38	6	1.9	US-09-085-761A-77
39	6	1.9	US-07-796-361A-15
40	6	1.9	US-08-591-498-16
41	6	1.9	US-08-672-345C-18
42	6	1.9	US-08-672-345C-108
43	6	1.9	US-09-214-095D-18
44	6	1.9	US-09-214-095D-98
45	6	1.9	US-08-322-573-2
46	6	1.9	US-08-591-498-16
47	6	1.9	US-09-096-244-2
48	6	1.9	US-08-846-762-2
49	6	1.9	US-08-700-607-7
50	6	1.9	US-08-41-629-13
51	6	1.9	US-08-776-207-13
52	6	1.9	US-08-912-431-91
53	6	1.9	US-08-705-771-19
54	6	1.9	US-08-284-391B-27
55	6	1.9	US-09-218-950-27
56	6	1.9	PCT-US92-0185-27
57	6	1.9	PCT-US95-00494-27
58	6	1.9	US-08-705-771-19
59	6	1.9	US-08-906-769-91
60	6	1.9	US-08-906-616-91
61	6	1.9	US-08-817-795-91
62	6	1.9	US-08-639-075A-91
63	6	1.9	US-09-012-431-91
64	6	1.9	US-09-012-692-91
65	6	1.9	US-08-906-613-91
66	6	1.9	US-08-807-044-1
67	6	1.9	US-08-807-044-1
68	6	1.9	US-08-462-169B-13
69	6	1.9	US-08-462-169B-13
70	6	1.9	US-08-700-607-8
71	6	1.9	US-09-103-079-13
72	6	1.9	US-08-439-725A-12
73	6	1.9	US-08-464-590A-17
74	6	1.9	US-08-207-112B-12
75	6	1.9	US-08-867-471-12

## ALIGNMENTS

RESULT 1  
 US-08-485-455D-65  
 ; Sequence 65, Application US/08485455D  
 ; Patent No. 51712143

GENERAL INFORMATION:  
 APPLICANT: Gieve, Robert B.  
 APPLICANT: Rushlow, Keith E.  
 APPLICANT: Wu Hunter, Shirley  
 APPLICANT: Frank, Glenn R.  
 APPLICANT: Stiegler, Gary L.

TITLE OF INVENTION: FLEA PROTEASE PROTEINS- NUCLEIC ACID  
 TITLE OF INVENTION: MOLECULES, AND USES THEREOF  
 NUMBER OF SEQUENCES: 79

RESULT 1  
 US-08-485-455D-65  
 ; Sequence 65, Application US/08485455D  
 ; Patent No. 51712143

GENERAL INFORMATION:  
 APPLICANT: Gieve, Robert B.  
 APPLICANT: Rushlow, Keith E.  
 APPLICANT: Wu Hunter, Shirley  
 APPLICANT: Frank, Glenn R.  
 APPLICANT: Stiegler, Gary L.

TITLE OF INVENTION: FLEA PROTEASE PROTEINS- NUCLEIC ACID  
 TITLE OF INVENTION: MOLECULES, AND USES THEREOF  
 NUMBER OF SEQUENCES: 79

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/485,455D  
FILING DATE: 07-JUN-1995  
CLASSIFICATION: 424  
ATTORNEY/AGENT INFORMATION:  
NAME: Connell, Gary J.  
REGISTRATION NUMBER: 32,020  
REFERENCE/DOCKET NUMBER: 2618-25-C1-3

TELECOMMUNICATION INFORMATION:  
TELEPHONE: (303) 863-9700  
TELEX: (303) 863-0223  
INFORMATION FOR SEQ ID NO: 65:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 48 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
MOLECULE NUMBER: 8-485-455D-65

Query Match 2.6%; Score 8; DB 2; Length 4  
Best Local Similarity 100.0%; Pred. No. 1; 8; 0; Mismatches  
Matches 8; Conservative 0; Mismatches 0; Indels  
QY 252 VLVVLAVI 259  
Db 1 VLVVLAVI 8

RESULT 3  
US-08-484-211C-65  
; Sequence 65, Application US/08484211C  
; Patent NO. 5972645

GENERAL INFORMATION:  
APPLICANT: Grieve, Robert B.  
APPLICANT: Rushlow, Keith E.  
APPLICANT: Wu, Hunter, Shirley  
APPLICANT: Frank, Glenn R.  
APPLICANT: Steigler, Gary L.

TITLE OF INVENTION: FLEA PROTEASE PROTEINS, NUCLEIC ACID  
TITLE OF INVENTION: MOLECULES, AND USES THEREOF  
NUMBER OF SEQUENCES: 79

ADDRESSEE: Sheridan Ross P.C.  
STREET: 1700 Lincoln Street, Suite 3500  
CITY: Denver  
STATE: Colorado  
COUNTRY: USA  
ZIP: 80203

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC Compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/484,211C  
FILING DATE: 07-JUN-1995  
CLASSIFICATION: 424  
ATTORNEY/AGENT INFORMATION:  
NAME: Connell, Gary J.  
REGISTRATION NUMBER: 32,020  
REFERENCE/DOCKET NUMBER: 2618-25-C1

TELECOMMUNICATION INFORMATION:  
TELEPHONE: (303) 863-9700  
TELEX: (303) 863-0223  
INFORMATION FOR SEQ ID NO: 65:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 48 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
MOLECULE NUMBER: US-08-484-211C-65

Query Match 2.6%; Score 8; DB 2; Length 4  
Best Local Similarity 100.0%; Pred. No. 1; 8; 0; Mismatches  
Matches 8; Conservative 0; Mismatches 0; Indels  
QY 252 VLVVLAVI 259  
Db 1 VLVVLAVI 8

RESULT 4  
US-08-906-769-65  
; Sequence 65, Application US/08906769  
; Patent No. 6077687

Copyright (c) 1993 - 2000 Compugen Ltd.  
 OM protein - protein search, using sw model  
 Run on: September 19, 2002, 17:33:22 ; Search time 30.81 Seconds  
 (without alignments)  
 966.819 Million cell updates/sec

Query Match	2.6%	Score 8; DB 2;	Length 146;
Best Local Similarity	100.0%	Pred. No. 2.6;	Probable beta-glucosidase [imported] - Arabidopsis thaliana
Matches	8;	Conservative 0;	C; Species: <i>Arabidopsis thaliana</i> (mouse-ear cress)
QY	252	VLVVLAVI 259	C; Date: 05-Mar-1999 #sequence_revision 05-Mar-1999 #text_change 16-Feb-2001
Db	5	VLVVLAVI 12	C; Accession: T02400; P84878
RESULT	2		R.Roundsley, S.D.; Lin, X.; Ketchum, K.A.; Crosby, M.L.; Brandon, R.C.; Sykes, S.M.; K
A89919			Submitted to the EMBL Data Library.
			A; Description: <i>Arabidopsis thaliana</i> chromosome II BAC F4II genomic sequence.
			A; Reference number: Z14667
			A; Accession: T02400
			A; Status: translated from GB/EMBL/DBJ
			A; Molecule type: DNA
			A; References: 1-506 <ROU>
			A; Cross-references: EMBL:AC004521; NID:g3128166; PIDN:AC16091.1; PID:g3128187
			A; Experimental source: cultivar Columbia
			R.Lin, X.; Kaul, S.; Rounsaville, S.D.; Shea, T.P.; Benito, M.I.; Town, C.D.; Fujii, C.Y.
			M.; Koo, H.; Moffat, K.S.; Cronin, L.A.; Shen, M.; VanAken, S.E.; Umayam, L.; Tallon, J.
			euess, D.; Nierman, W.C.; White, O.; Eisen, J.A.; Salzberg, S.L.; Fraser, C.M.; Venter, C.
			Nature 402, 761-768, 1999
			A; Title: Sequence and analysis of chromosome 2 of the plant <i>Arabidopsis thaliana</i> .
			A; Reference number: AB4420; MUID:2063487
			A; Accession: F84878
			A; Status: preliminary
			A; Molecule type: DNA
			A; Residues: 1-506 <STO>
			A; Cross-references: GB:AE002093; NID:g3128187; PIDN: AAC16091.1; GSDB:GN00139
			C; Genetics: F411.26; At2g44450
			A; Map position: 2
			A; Gene: F411.26; At2g44450
			A; Introns: 50/3; 74/1; 93/3; 119/1; 145/1; 174/2; 259/3; 370/1; 380/3; 415/1; 447/2
			C; Superfamily: Agrobacterium beta-glucosidase
RESULT	3		Query Match 2.6%; Score 8; DB 2;
DB3431			Length 204;
			Best Local Similarity 100.0%; Pred. No. 3.5;
			Matches 8; Conservative 0; Mismatches 0;
			QY 242 IAGIGGV 249
			Db 181 IAGIGGV 188
RESULT	4		Query Match 2.6%; Score 8; DB 2;
DB3431			Length 204;
			Best Local Similarity 100.0%; Pred. No. 3.5;
			Matches 8; Conservative 0; Mismatches 0;
			QY 242 IAGIGGV 249
			Db 181 IAGIGGV 188
RESULT	5		Query Match 2.6%; Score 8; DB 2;
DB5276			Length 506;
			Best Local Similarity 100.0%; Pred. No. 7.8;
			Matches 8; Conservative 0; Mismatches 0;
			QY 250 LVVVLVLA 257
			Db 9 LVVVLVLA 16
RESULT	5		Query Match 2.6%; Score 8; DB 2;
EB5276			Length 506;
			Hypothetical protein At4g24020 [imported] - <i>Arabidopsis thaliana</i>
			C; Species: <i>Arabidopsis thaliana</i> (mouse-ear cress)
			C; Date: 16-Feb-2001 #sequence_revision 16-Feb-2001 #text_change 02-Mar-2001
			C; Accession: E85276
			C; anonymous, The European Union <i>Arabidopsis</i> Genome Sequencing Consortium, The Cold Sp
			Nature 402, 769-777, 1999
			A; Title: Sequence and analysis of chromosome 4 of the plant <i>Arabidopsis thaliana</i> .
			A; Reference number: AB5001; MUID:20083488
			A; Accession: E85276
			A; Status: preliminary
			A; Molecule type: DNA
			A; Residues: 1-959 <STO>
			A; Cross-references: GB:NC_001268; NID:97269251; PIDN: CAB81320.1; GSDB:GN00140
			C; Genetics: F411.26; At2g44450
			A; Map position: 4
			C; Superfamily: <i>Arabidopsis thaliana</i> hypothetical protein F23E12.170
RESULT	6		Query Match 2.6%; Score 8; DB 2;
GLYC			Length 959;
			Best Local Similarity 100.0%; Pred. No. 14;
			Matches 8; Conservative 0; Mismatches 0;
			QY 30 EAVNLKSS 37
			Db 300 EAVNLKSS 307
RESULT	6		Query Match 2.6%; Score 8; DB 2;
GLYC			Length 959;
			Best Local Similarity 100.0%; Pred. No. 14;
			Matches 8; Conservative 0; Mismatches 0;
			QY 30 EAVNLKSS 37
			Db 300 EAVNLKSS 307
RESULT	4		Query Match 2.6%; Score 8; DB 2;
TO2400			Length 208;
			Best Local Similarity 100.0%; Pred. No. 3.6;
			Matches 8; Conservative 0; Mismatches 0;
			QY 4 SRRRLRL 11
			Db 160 SRRRLRL 167

GenCore version 4.5						
Copyright (c) 1993 - 2000 Compugen Ltd.						
Title:	Run on:	September 19, 2002, 17:39:47 ; Search time 17.64 Seconds				
Perfect score:	US-09-524-531C-13	(without alignments)				
Scoring table:	OLIGO	680.446 Million cell updates/sec				
Sequence:	1 MALSRRRLRILYRLPHFL..... VNVIRTSEEDFRHKSSFVI	310				
Searched:	105224 seqs,	38719550 residues				
size :	0					
Total number of hits satisfying chosen parameters:	10524					
Minimum DB seq length:	0					
Maximum DB seq length:	200000000					
Post-processing:	Listing first 75 summaries					
Database :	Swissprot_40: *					
Pred. No.	is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.					
SUMMARIES						
Result No.	Score	Query Length	DB ID	Description		
1	8	2.6	146	Y142_AQUAE	066537 aquifex aeo	PF02252 pseudomonas
2	7	2.3	118	ATPZ_SYNMP6	080443 synechococc	Q91J98 arachnophila
3	7	2.3	137	EXSB_PSEAE	P26994 pseudomonas	Q91J99 arachnophila
4	7	2.3	224	XLR1_MOUSE	Q92114 mus musculus	Q91J99 arachnophila
5	7	2.3	232	Y0ZL_YEAST	Q93210 sacccharomyces	Q91J99 arachnophila
6	7	2.3	269	I6GT_BACSU	Q93475 bacillus su	Q91J99 arachnophila
7	7	2.3	280	CHR2_PSEAE	Q94767 pseudomonas	Q91J99 arachnophila
8	7	2.3	331	G3P2_YEAST	P00358 sacccharomyces	Q91J99 arachnophila
9	7	2.3	331	G3P3_YEAST	P017729 trichoderma	Q91J99 arachnophila
10	7	2.3	335	I_G3P1_TRIK0	P22672 escherichia	Q91J99 arachnophila
11	7	2.3	359	PTWC_ECOLI	P96669 tripanosoma	Q91J99 arachnophila
12	7	2.3	374	R14_TRYBB	P01111 borrelia bu	Q91J99 arachnophila
13	7	2.3	422	CSD_BORBU	Q67140 aquifex aeo	Q91J99 arachnophila
14	7	2.3	452	SELA_AQUAE	Q98621 caenorhabditis	Q91J99 arachnophila
15	7	2.3	473	YS81_CAEEL	P001778 oryctolagus	Q91J99 arachnophila
16	7	2.3	491	CPB4_RABTT	P12789 oryctolagus	Q91J99 arachnophila
17	7	2.3	491	CPB5_RABTT	Q9V770 drosophila	Q91J99 arachnophila
18	7	2.3	501	C6AH_DROME	Q9V771 drosophila	Q91J99 arachnophila
19	7	2.3	502	C6AN_DROME	P09755 bacillus su	Q91J99 arachnophila
20	7	2.3	505	NDFH_DROME	P33389 sacccharomyces	Q91J99 arachnophila
21	7	2.3	586	HOLI_YEAST	P17998 escherichia	Q91J99 arachnophila
22	7	2.3	697	CEAD_ECOLI	P18753 saccharomyces	Q91J99 arachnophila
23	7	2.3	758	SC18_YEAST	P18753 saccharomyces	Q91J99 arachnophila
24	7	2.3	774	VP4_ROTHT	P11197 human rotavirus	Q91J99 arachnophila
25	7	2.3	775	VP4_ROTIN	P11197 human rotavirus	Q91J99 arachnophila
26	7	2.3	776	VP4_ROTIN	P05798 sacccharomyces	Q91J99 arachnophila
27	7	2.3	840	CC16_YEAST	P08097 escherichia	Q91J99 arachnophila
28	7	2.3	1015	YAL17_HUMAN	P24578 caenorhabditis	Q91J99 arachnophila
29	7	2.3	1105	YEG5_ECOLI	P28133 bos taurus	Q91J99 arachnophila
30	7	2.3	1234	YNX5_CAEEEL	P35553 homo sapiens	Q91J99 arachnophila
31	7	2.3	2871	FBNL_BOVIN	P35554 mus musculus	Q91J99 arachnophila
32	7	2.3	2871	FBNL_HUMAN	Q91J99 arachnophila	Q91J99 arachnophila
33	7	2.3	2871	FBNL_MOUSE	Q91J99 arachnophila	Q91J99 arachnophila
ALIGNMENTS						
RESULT	1	Y142_AQUAE	ID	Y142_AQUAE	STANDARD;	PRN:
			AC	066537;		146 AA.
			DT	16-OCT-2001 (Rel. 40, Created)		
			DT	16-OCT-2001 (Rel. 40, Last sequence update)		
			DT	16-OCT-2001 (Rel. 40, Last annotation update)		
			DE	Hypothetical protein A0_142.		
			GN	AQ_142.		
			OS	Aquifex aeolicus.		
			OC	Bacteria; Aquificales; Aquificaceae; Aquifex.		
			OX	NCBI_TaxID:63363;		
			RN	[1]		
			RP	SEQUENCE FROM N.A.		
			RC	STRAIN=VF5;		
			RX	MEDLINE=9816666; PubMed=9537320;		
			RA	Decker G., Warren P.V., Gaasterland T., Young W.G., Lenox A.L., Graham D.E., Overbeek R., Snead M.A., Keller M., Aufay M., Huber R., Feldman R.A., Short J.M., Olson G.J., Swanson R.V.;		
			RA	"The complete genome of the hyperthermophilic bacterium Aquifex aeolicus."		
			RT	Nature 392:353-358 (1998).		
			RL	CC	This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its	

use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See <http://www.isb-sib.ch/announce/> or send an email to license@isb-sib.ch).

CC  
CC  
CC  
DR  
KW  
SEQUENCE 146 AA; 16321 MW; 9e98226A820CC2B2 CRC64;

Query Match 2.6%; Score 8; DB 1; Length 146;  
Best Local Similarity 100.0%; Pred. No. 1.3;  
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
SQ 5 VLIVLAVI 12

ILT 2  
\_SYNP6 STANDARD; PRT; 118 AA.  
ID ATPZ\_SYNP6  
AC P08443;  
DT 01-AUG-1988 (Rel. 08, created)  
DT 01-AUG-1988 (Rel. 08, last sequence update)  
DT 16-OCT-2001 (Rel. 40, last annotation update)  
DE ATP synthase protein I.  
GN ATP1.  
OS Synechococcus sp. (strain PCC 6301) (Anacystis nidulans).  
OC Bacteria; Cyanobacteria; Chroococcales; Synechococcus.  
OC NCBI\_TAXID=1139;  
RN [1]  
RN SEQUENCE FROM N.A.  
RX MEDLINE:87311713; PubMed=3041005;  
RA Cozens A.L., Walker J.E.;  
RT "The organization and sequence of the genes for ATP synthase subunits in the cyanobacterium Synechococcus 6301. Support for an endosymbiotic origin of chloroplasts";  
RL J. Mol. Biol. 194:359-383(1987).  
CC -!- FUNCTION: A POSSIBLE FUNCTION FOR THIS PROTEIN IS TO GUIDE THE ASSEMBLY OF THE MEMBRANE SECTOR OF THE ATPase ENZYME COMPLEX.  
CC -!- SIMILARITY: TO THE CORRESPONDING SUBUNIT IN OTHER BACTERIA.  
CC This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See <http://www.isb-sib.ch/announce/> or send an email to license@isb-sib.ch).

DR EMBL; X55302; CAA8922-1; -.  
DR PIR; S10825; GLYC.  
FT HYDROGEN ion transport; CF(0); Transmembrane.  
FT TRANSMEM 73 93 31 POTENTIAL.  
FT TRANSMEM 94 114 POTENTIAL.  
SQ SEQUENCE 118 AA; 13455 MW; 16B76A7F76CC196 CRC64;

Query Match 2.3%; Score 7; DB 1; Length 137;  
Best Local Similarity 100.0%; Pred. No. 11;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
SQ 7 LRURLYA 13  
Db 41 LRURLYA 47

RESULT 4  
XRLL\_MOUSE STANDARD; PRT; 224 AA.  
ID XRLL\_MOUSE  
AC Q9ZL4;  
DT 30-MAY-2000 (Rel. 39, Created)  
DT 30-MAY-2000 (Rel. 39, last sequence update)  
DT 16-OCT-2001 (Rel. 40, last annotation update)  
DE X-linked Juvenile retinoic acid receptor precursor.  
GN RSI OR RSIH OR XLIISI.  
OS Mus musculus (Mouse).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.  
OX NCBI\_TAXID10090;  
RN [1]  
RP SEQUENCE FROM N.A.  
RC STRAIN=129/SVJ;

DT 01-AUG-1992 (Rel. 23, Created)  
DT 16-OCT-2001 (Rel. 40, last sequence update)  
DT 16-OCT-2001 (Rel. 40, last annotation update)  
DE Exoenzyme S synthesis protein B.  
GN EXSB OR PAIIIZ.  
OS Pseudomonas aeruginosa.  
OC Bacteria; Proteobacteria; gamma subdivision; Pseudomonadaceae; Pseudomonas.  
OX NCBI\_TAXID=287;  
RN [1]  
RN SEQUENCE FROM N.A.  
RX MEDLINE:92011420; PubMed=1655713;  
RA Stover C.K., Pham X.-O.T., Erwin A.L., Mizoguchi S.D., Warrener P., Hickey M.J., Brinkman F.S.L., Hufnagel L., Kowalik D.J., Lagrou M., Gartler R.L., Goltry L., Tolentino E., Westbroek-Wadman S., Yuan Y., Brody L.L., Coulter S.N., Folger K.R., Kas A., Larbig K., Lim R.M., Smith K.A., Spencer D.H., Wong G.K.-S., Wu Z., Paulsen I.T., Reizer J., Sauer M.H., Hancock R.E.W., Lory S., Olson M.V.; RT "Complete genome sequence of Pseudomonas aeruginosa PAO1, an opportunistic pathogen.";  
RL Nature 406:959-965(2000).  
CC -!- SIMILARITY: TO YEMEROCOLITICA VIRB.  
CC This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See <http://www.isb-sib.ch/announce/> or send an email to license@isb-sib.ch).  
CC ---  
DR EMBL; M04975; AAA25815.1; -.  
DR PIR; B41047; B41047.  
DR PIR; B41047; B41047.  
KW Complete proteome.  
FT CONFLICT 62 R -> W (IN REF. 1).  
SEQUENCE 137 AA; 14996 MW; F7367E7AB301C4EA CRC64;

Query Match 2.3%; Score 7; DB 1; Length 137;  
Best Local Similarity 100.0%; Pred. No. 13;  
Matches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
SQ 7 LRURLYA 13  
Db 41 LRURLYA 47

RESULT 4  
XRLL\_MOUSE STANDARD; PRT; 224 AA.  
ID XRLL\_MOUSE  
AC Q9ZL4;  
DT 30-MAY-2000 (Rel. 39, Created)  
DT 30-MAY-2000 (Rel. 39, last sequence update)  
DT 16-OCT-2001 (Rel. 40, last annotation update)  
DE X-linked Juvenile retinoic acid receptor precursor.  
GN RSI OR RSIH OR XLIISI.  
OS Mus musculus (Mouse).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.  
OX NCBI\_TAXID10090;  
RN [1]  
RP SEQUENCE FROM N.A.  
RC STRAIN=129/SVJ;

RESULT 3  
EXSB\_PSEAE STANDARD; PRT; 137 AA.  
ID EXSB\_PSEAE  
AC P26994;

Copyright GenCore version 4.5  
(c) 1993 - 2000 Compugen Ltd.

OM protein - protein search, using sw model

Run on: September 19, 2002, 17:38:12 ; Search time 48.09 seconds  
(without alignments)  
115.168 Million cell updates/sec

Title: US-09-524-531C-13  
Perfect score: 310  
Sequence: 1 M A L S R R L R L Y A R L P H F F L . . . . . . . . . V N Y I R T S E E G D F R H K S S F V I 310

Scoring table: OLIGO  
Gapop 60.0 , Gapext 60.0

Searched: 562222 seqs, 172994929 residues  
size : 0

Total number of hits satisfying chosen parameters: 562222

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Listing first 75 summaries

Database : SPTREMBL-19:  
1: sp\_archaea:  
2: sp\_bacteria:  
3: sp\_fungi:  
4: sp\_human:  
5: sp\_invertebrate:  
6: sp\_mammal:  
7: sp\_mhc:  
8: sp\_organelle:  
9: sp\_phage:  
10: sp\_plant:  
11: sp\_rabbit:  
12: sp\_virus:  
13: sp\_vertebrate:  
14: sp\_unclassified:  
15: sp\_virus:  
16: sp\_bacteriaph:  
17: sp\_archeap:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match Length	DB ID	Description
1	253	81.6	310 11 Q9EPK4	Q9epk4 mus musculus
2	245	79.0	310 11 Q9D1M9	Q9d1m9 mus musculus
3	152	49.0	310 11 Q9DB87	Q9db87 mus musculus
4	24	7.7	309 4 Q96FL1	Q96fl1 homo sapiens
5	24	7.7	310 4 Q9B6F7	Q9b6f7 homo sapiens
6	8	2.6	204 16 Q99U70	Q99u70 staphylococci
7	8	2.6	206 2 P95439	P95439 pseudomonas
8	8	2.6	208 16 Q9I313	Q9i313 pseudomonas
9	8	2.6	246 5 Q9XY46	Q9xy46 ctenocephalid
10	8	2.6	400 10 Q9LT44	Q9lt44 arabidopsis
11	8	2.6	506 10 Q9EPKA	Q9epka arabidopsis
12	8	2.6	959 10 Q22987	Q22987 arabidopsis
13	7	2.3	85 12 Q99GX8	Q99gx8 helicobacte
14	7	2.3	95 10 Q9FE08	Q9fe08 perilla frutescens
15	7	2.3	121 2 Q93HQ4	Q93hq4 streptococcus
16	7	2.3	125 11 Q9CS62	Q9cs62 mus musculus

SUMMARIES

RESULT	Q9EPK4	ID	PRELIMINARY:	PRT:	310 AA.
1	Q9EPK4	AC	O9EPK4; DT	DT	01-MAR-2001 (TREMBLrel. 16, Created)
1	Q9EPK4	AC	O9EPK4; DT	DT	01-MAR-2001 (TREMBLrel. 16, Last sequence update)
1	Q9EPK4	AC	O9EPK4; DT	DT	01-DEC-2001 (TREMBLrel. 19, Last annotation update)
1	Q9EPK4	AC	O9EPK4; DE	DE	JUNCTIONAL ADHESION MOLECULE-2, JAM-2 (111002N23Rik PROTEIN).
1	Q9EPK4	AC	O9EPK4; DE	DE	JCAM2 OR JAM-2 OR 111002N23Rik.

		RESULT	2
		Q9D1M9	PRELIMINARY;
		ID Q9D1M9;	PRT; 310 AA.
		AC Q9D1M9;	
		DT 01-JUN-2001 (TREMBlrel. 17, Created)	
		DT 01-JUN-2001 (TREMBlrel. 17, Last sequence update)	
		DT 01-DEC-2001 (TREMBlrel. 19, Last annotation update)	
		DE 110002W23RIK PROTEIN	
		JCAM2 OR 110002W23RIK	
		OS Mus musculus (Mouse).	
		OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.	
		OX NCBI_TAXID=10090;	
		RN [1]	
		SEQUENCE FROM N.A.	
		RC STRAIN=C57BL/6J; TISSUE=EMBRYO;	
		RX MEDLINE=21085660; PubMed=11217851;	
		RA Kawai J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,	
		RA Kadota K., Matsuda H.A., Ashburner M., Battalov S., Casavant T.,	
		RA Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,	
		RA Kuehn P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,	
		RA Schiml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,	
		RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,	
		RA Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,	
		RA Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,	
		RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,	
		RA Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombarts P.,	
		RA Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,	
		RA Sasaki H., Sato K., Schoenbach C., Seva T., Shibata Y., Storch K.-F.,	
		RA Suzuki H., Toyoko K., Wang K.H., Weitz C., Whittaker C., Wilming L.,	
		RA Wynnshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,	
		RA Hayashizaki Y.,	
		RA "Functional annotation of a full-length mouse cDNA collection.";	
		RL Nature 409:685-690(2001).	
		EMBL: AJ300304; CIGC20704_1; -.	
		EMBL: AK013156; Bab28683_1; -.	
		MGD: MGI:1933820; Jcam2.	
		DR InterPro; IPR00359; Ig.	
		DR InterPro; IPR003598; Ig_c2.	
		DR InterPro; IPR03600; Ig_like.	
		DR InterPro; IPR030306; Ig_MHC.	
		DR Pfam; PF00047; Ig_2.	
		DR SMART; SM00409; Ig; 2.	
		DR SMART; SM00408; IgC2; 2.	
		DR SMART; SM00410; Ig3-like; 1.	
		KW Immunoglobulin domain.	
		SC SEQUENCE 310 AA; 34837 MW; 4B92BCB51D0A4B0A CRC64;	
		Query Match 81.6%; Score 253; DB 11; Length 310;	
		Best Local Similarity 100.0%; Pred. No. 1.5e-252; Mismatches 0; Indels 0; Gaps 0;	
		Matches 253; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	
QY	58	SQSDPDRIEWKKIQQDGQTIVYFDNKIQGDLAGRTDFGKTSIRIWNTRSASIYCEV 117	
Db	58	SQSDPDRIEWKKIQQDGQTIVYFDNKIQGDLAGRTDFGKTSIRIWNTRSASIYCEV 117	
QY	118	VALNDRKVEDEITIELIVQVKPVCPRAAPVGKATLOQEQSEGYPRPHYSWRND 177	
Db	118	VALNDRKVEDEITIELIVQVKPVCPRAAPVGKATLOQEQSEGYPRPHYSWRND 177	
QY	178	VPLPTDSRANPRONPFISSPHVNSEGTLYFVNNAVHKDDSGOYCCTASNDAGAAREGODEV 237	
Db	178	VPLPTDSRANPRONPFISSPHVNSEGTLYFVNNAVHKDDSGOYCCTASNDAGAAREGODEV 237	
QY	238	YDLNIAIGIGGVVLWLILAVIMGICCAARCGFISSKQDGSKYSPKGKHGVNIRTS 297	
Db	238	YDLNIAIGIGGVVLWLILAVIMGICCAARCGFISSKQDGSKYSPKGKHGVNIRTS 297	
QY	258	EEDGRHKSSFVI 310	
Db	298	EEDGRHKSSFVI 310	
		RB 298 EEDGRHKSSFVI 310	
		Query Match 79.0%; Score 245; DB 11; Length 310;	
		Best Local Similarity 100.0%; Pred. No. 2.8e-244; Mismatches 0; Indels 0; Gaps 0;	
		Matches 245; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	
QY	58	SQSDPDRIEWKKIQQDGQTIVYFDNKIQGDLAGRTDFGKTSIRIWNTRSASIYCEV 117	
Db	58	SQSDPDRIEWKKIQQDGQTIVYFDNKIQGDLAGRTDFGKTSIRIWNTRSASIYCEV 117	
QY	118	VALNDRKVEDEITIELIVQVKPVCPRAAPVGKATLOQEQSEGYPRPHYSWRND 177	
Db	118	VALNDRKVEDEITIELIVQVKPVCPRAAPVGKATLOQEQSEGYPRPHYSWRND 177	
QY	178	VPLPTDSRANPRONPFISSPHVNSEGTLYFVNNAVHKDDSGOYCCTASNDAGAAREGODEV 237	
Db	178	VPLPTDSRANPRONPFISSPHVNSEGTLYFVNNAVHKDDSGOYCCTASNDAGAAREGODEV 237	
QY	238	YDLNIAIGIGGVVLWLILAVIMGICCAARCGFISSKQDGSKYSPKGKHGVNIRTS 297	
Db	238	YDLNIAIGIGGVVLWLILAVIMGICCAARCGFISSKQDGSKYSPKGKHGVNIRTS 297	
		RB 238 YDLNIAIGIGGVVLWLILAVIMGICCAARCGFISSKQDGSKYSPKGKHGVNIRTS 297	

QY	298	ERCDF	302	Db	238	YDLNFIAGIGVVLVLLAVITMGICCAYRRGCFISSKODGESYKSPGKHGVNVIWTS	297
Db	298	EEDCDF	302	Qy	298	EEGDRHKSSFVI	310
Qy	298	EEDGRHKSSFVI	310	Db	298	EEDGRHKSSFVI	310
RESULT	3			RESULT	4		
ID	QDB87	PRELIMINARY;	PRT;	ID	Q96FL1	PRELIMINARY;	PRT;
AC	QDB87;		310 AA.	AC	Q96FL1		309 AA.
DT	01-JUN-2001 (TREMBlrel. 17, Created)			DT	01-DEC-2001 (TREMBlrel. 19, Last sequence update)		
DE	01-DEC-2001 (TREMBlrel. 19, Last annotation update)			DE	01-DEC-2001 (TREMBlrel. 19, Last annotation update)		
GN	JCAM2 OR 1110020B23RIK.			DT	01-DEC-2001 (TREMBlrel. 19, Last sequence update)		
OS	MUS musculus (Mouse)			DT	01-DEC-2001 (TREMBlrel. 19, Last annotation update)		
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;			DE	UNKNOWN (PROTEIN FOR IMAGE:3875338) (FRAGMENT).		
OC	Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.			OS	Homo sapiens (Human).		
NCBI_TaxID=10990;				OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;		
RN	[1]			OC	Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.		
SEQUENCE FROM N.A.				OC	Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.		
STRAIN=C5BL/6;	TISSUE=SMALL INTESTINE;			NCBI_TaxID=9606;			
MEDLINE=21085660; PubMed=12121785;				RN	[1]		
RA	Kawai J., Shingawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,			RP			
RA	Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,			RC			
RA	Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamakawa T.,			RA			
RA	Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R.,			RA			
RA	Kadoya K., Matsuda H.A., Ashburner M., Batyalov S., Casavant T.,			RA			
RA	Fleischmann R., Gaasterland T., Gissi C., King B., Kochiwa H.,			RA			
RA	Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,			RA			
RA	Schrimal L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,			RA			
RA	Sakai K., Ohido T., Furuno M., Aono H., Baldarelli R., Barsh G.,			RA			
RA	Blake J., Boffelli D., Bojunga N., Corninci P., de Bonaldo M.F.,			RA			
RA	Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,			RA			
RA	Lyonis P., Marchionni L., Mashima J., Mazzarelli J., Mombaeerts P.,			RA			
RA	Nordon P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,			RA			
RA	Sasaki H., Sato K., Schoenbach C., Sera T., Shibata Y., Storch K.-F.,			RA			
RA	Suzuki H., Toyo-oka K., Wang K.H., Weltz C., Whittaker C., Wimling L.,			RA			
RA	Wynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,			RA			
RA	Hayashizaki Y.,			RA			
RT	"Functional annotation of a full-length mouse cDNA collection.";			RA			
RL	Nature 409:685-690(2001)			RA			
DR	EMBL; AK08187; BAB2519.1; -.			RA			
DR	MDB; MG1:1933820; Jcanc2.			RA			
DR	InterPro; IPR01599; Ig.			RA			
DR	InterPro; IPR03598; Ig_C2.			RA			
DR	InterPro; IPR03600; Ig_L1ne.			RA			
DR	InterPro; IPR03006; Ig_MHC.			RA			
Pfam; PF0047; Ig; 2.				RA			
SMART; SM00409; IGC2; 2.				RA			
SMART; SM00410; Ig_Like; 1.				RA			
KW	Immunoglobulin domain.			RA			
SO	SEQUENCE 310 AA; 34855 MW; C74884EABE234680 CRC64;			RA			
Query Match	49.0%	Score 152; DB 11; Length 310;		RESULT	5		
Best Local Similarity	99.6%	Pred. No. 2.6e-148; Matches 252; Conservative 0; Mismatches 1; Indels 0; Gaps 0;		ID	Q9BX67	PRELIMINARY;	PRT;
				AC	Q9BX67;		310 AA.
OY	58 SOTSDPRIEKKIQDGTOTTYVIFDNKIQGDLAGTRDVFGKTSRLIRNWTRSDSAIYCEV 117			DT	01-JUN-2001 (TREMBlrel. 17, Created)		
Db	58 SOTSDPRIEKKIQDGTOTTYVIFDNKIQGDLAGTRDVFGKTSRLIRNWTRSDSAIYCEV 117			DT	01-JUN-2001 (TREMBlrel. 17, Last sequence update)		
OY	118 VALNDRKEYDETTIELIVQVKPVTCRIPAAVPVGKTPATLOCQESGGYPRPHYSWRND 177			DT	01-DEC-2001 (TREMBlrel. 19, Last annotation update)		
Db	118 VALNDRKEYDETTIELIVQVKPVTCRIPAAVPVGKTPATLOCQESGGYPRPHYSWRND 177			DE	JUNCTIONAL ADHESION MOLECULE 3 PRECURSOR (JUNCTIONAL ADHESION MOLECULE 2).		
RN	[1]			DE	JAM-2.		
RP	SEQUENCE FROM N.A.			GN			
RC	TISSUE=BRAIN;			OS			
RA	Cunningham S.A., Arrate M.P., Tran T.M.; "Cloning of Human Junctional Adhesion Molecule 3.";			OC			
RT	Submitted (MAR-2001) to the EMBL/GenBank/DDBJ databases.			OC			
RL	[2]			OC			
RN	SEQUENCE FROM N.A.			OC			
RA	Aurrand-Lions M.A., Johnson-leger C., Wong C., Dupasquier L.;			OC			
RT	"Heterogeneity of endothelial junctions is reflected by differential expression and specific subcellular localization of the three JAM family members."			OC			
RT	Submitted (AUG-2001) to the EMBL/GenBank/DDBJ databases.			OC			
RL	[3]			OC			
RN	SEQUENCE FROM N.A.			OC			
RA	Aurrand-Lions M.A., Johnson-leger C., Lamagna C., Ozaki H., Kita T.,			OC			
RT	"Junctional adhesion molecules (JAMs) and interendothelial junctions."			OC			
RT	Submitted (AUG-2001) to the EMBL/GenBank/DDBJ databases.			OC			
RL				OC			
DR	EMBL; AB356518; AAC27221.1; -.			OC			

